EXHIBIT B

PAGE ___ OF ___

WEEK ENDING	EMPLOYEE NAME	EMPLOYEE SIGNATURE	DATE
/ / 85			

EMP. NUMBER	HOURS CHARGED			ENTERED BY	APPROVAL	DATE
	.	.	.			

See travel sheets for expenses

DEPARTMENT/ PROJECT CODE	LABOR CODE	TOTAL	HOURS SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
		.	.	.	1-16 1.	1-17 2.	1-18 1.	1-19 3.	1-20 4.	
		.	.	.	1-23 .	1-24 2.	1-30 6.	1-31 5.	2-1 6.	30
		.	.	.	2-2 6.	2-3 4.	2-6 2.	2-7 2.	2-8 2.	
		.	.	.	2-9 8.	2-10 7.	2-14 4.	2-15 4.	2-16 1.	74 ~~65~~
		.	.	.	2-17 6.	.	.	.	.	
		.	.	.	2-23 5.	2-24 8.	2-25 4.	2-26 8.	2-27 4.	109
		.	.	.	.	.	.	.	.	-13.6 days
		.	.	.	3-1 3.	3-2 .	3-3 3.	3-4 2.	.	142
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
		.	.	.	.	.	.	.	.	
TOTAL HOURS CHARGED		.	.	.	.	.	.	.	.	

UNPAID LEAVE OF ABSENCE								
	.	.	.	.	.	.	.	.

INPUT

1984 QUARTERLY SCHEDULING PLAN (Q1)

PROJECT: UCPL

DATE: 1-13-84

PROJECT LEADER: Alexia Martin (Steve Kerns)

ACTIVITY / PROJECT	NAME	MAN DAYS	EFFI-CIENCY	ESMD	CORP. WEEK END	1 1/6	2 1/13	3 1/20	4 1/27	5 2/3	6 2/10	7 2/17	8(4) 2/24	9 3/2	10 3/9	11 3/16	12 3/23	13 3/30
	CORPORATE/WEEK ENDING					JANUARY				FEBRUARY				MARCH				
PROJECT AUTHORIZATION/ SPECIFICATION	AM SK	1.0 0.5		1.0 0.5	1/27			1.0	.5									
Q DESIGN	AM	1.0		1.0	2/3				.5	.5								
Q APPROVAL/ REVIEW MEETING	SK	0.5		0.5	2/3					.5								
INTERVIEWS ON SITE (6) NO. 2/day	AM	3.0		3.0	2/10					1	2							
INTERVIEWS 5/day 15 PHONE ( ) NO. 10	AM RA	3.0 4.0	.5	3.0 2.0	2/10					2 1	1 1							
DATATAB AND ANALYSIS	RA	2.0	.5	1.0	2/10						1							
WRITING	AM	5.5		5.5	3/9							4	1	2-27 first draft	.5 3-5			
ABSTRACT, PR, + Cover letters	AM	0.5		0.5	3/5									.5	3/5			
QC	SK	1.0		1.0	3/2									1				
REPORT PROD. AND SHIPPING					3/30											MP	PR	Print	Ship
~~PRESENTATION~~ MGMT.	SK	1.0		1.0	3/9					.5	.5							
"THANK YOU" MAILED																		
PLAN	AM	14		14				1.0	0.5	3.5	3.0	4.0	1.0	0.5	0.5			
ACTUAL	SK	3		3					0.5	1.0	0.5			1.0				
CUM P/A	RA	6	.5	3						2 / 1	4 / 2							
TOTAL		23		20				1.0	1.0	6.5 / 5.5	7.5 / 5.5	4.0	1.0	1.5	0.5			

R12/83

INPUT

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO U C P L
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATE MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ TELEPHONE
☐ USER ☐ ON-SITE
☐ MAIL

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL: _____

_____

_____

INDUSTRY ☐

☐ DISCRETE MANUFACTURING ☐ UTILITIES ☐ INSURANCE
☐ PROCESS MANUFACTURING ☐ RETAIL ☐ GOVERNMENT- FEDERAL
☐ TRANSPORTATION ☐ BANKING ☐ GOVERNMENT-STATE & LOCAL
☐ MEDICAL ☐ WHOLESALE ☐ EDUCATION
☐ SERVICES ☐ OTHER

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

_____

_____

_____

REFERENCES

_____

_____

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO U C P L
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATE MM DD YY

STUDY TITLE:

TYPE OF INTERVIEW: ☐ VENDOR ☐ TELEPHONE
☐ USER ☐ ON-SITE
☐ MAIL

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL: _____

_____

_____

INDUSTRY ☐

☐ DISCRETE MANUFACTURING ☐ UTILITIES ☐ INSURANCE
☐ PROCESS MANUFACTURING ☐ RETAIL ☐ GOVERNMENT- FEDERAL
☐ TRANSPORTATION ☐ BANKING ☐ GOVERNMENT-STATE & LOCAL
☐ MEDICAL ☐ WHOLESALE ☐ EDUCATION
☐ SERVICES ☐ OTHER

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

_____

_____

_____

REFERENCES

_____

_____

_____

CATALOG NO. UCPL

TOPIC STATEMENT: We are writing a report on integrating information systems planning and business planning and would like to ask you some questions. The questions will take no more than 15 minutes to answer. For your assistance, we will send you a copy of the respondent summary of the report.

RESPONDENT FUNCTION: (Check one)

- ☐ Information Systems Management
- ☐ Business Planner
- ☐ Information Systems Planner
- ☐ General Management

1. CENTRALIZED or DECENTRALIZED:

We want to know how to characterize your company as centralized or decentralized in terms of information systems and business planning.

Is your Information Systems function centralized or decentralized?

☐ Centralized ☐ Decentralized

Does that mean your business planning is also centralized or decentralized?

☐ Centralized ☐ Decentralized

If decentralized, is there any corporate consolidation?

☐ Yes ☐ No

2. ISSUES:

What major issues are you addressing? (Check those which apply)

BUSINESS PLANNER or GENERAL MANAGEMENT

- ☐ Productivity
- ☐ Economic Downturn
- ☐ Other _____

_____

_____

INFORMATION SYSTEMS

- ☐ Manpower Planning and Development
- ☐ Capacity Planning
- ☐ System Architecture
- ☐ Microcomputer Proliferation
- ☐ Other _____

_____

_____

3. PLANS:

Do you have an Information Systems Plan? ☐ Yes ☐ No

If No - (terminate interview) _____

_____

Do you have an business plan? (Either formal or informal) ☐ Yes ☐ No

If No - (terminate interview) _____

_____

Do you believe you have an INTEGRATED Information Systems and Business Plan?

☐ Yes Go to **B**

☐ No Go to **A**

A NO - Integrated Information Systems Plan and Business Plan

4. Do you believe the two should be integrated? ☐ Yes ☐ No

Why or Why Not? _____

_____

_____

5. INPEDIMENTS:

What are the reasons or impediments to not integrating? (Check those which apply)

☐ Lack of Top Management Support

☐ Staff Constraints

☐ Time Constraints

☐ Don't Know Why We Should Integrate (Don't know the benefits)

☐ Don't Know How to Integrate

☐ Other _____

What do you feel the results of not integrating have been? (Check those which apply)

☐ Ineffective Resource Prioritization

☐ Information Systems Does Not Clearly Support Business Goals

☐ Increased Costs of Information Systems Development

☐ Other _____

_____

_____

6. METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology?

☐ Yes

☐ No (End the Interview)

Which one? (Check one)

☐ Business Systems Planning from IBM

☐ Critical Success Factors from MIT

☐ Internally Developed Methodology

☐ Other _____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

☐ Yes

☐ No (End the Interview)

What are the deficiencies? _____

_____

_____

_____

End the interview (Make sure you have address to send respondent summary)

B YES - Integrated Information Systems Plan and Business Plan

7. DEFINITION:

How do you define and characterize an integrated Information Systems and Business Plan? (Check those which apply)

- [ ] The Business Plan States the Information Systems Needs
- [ ] Business Plan and Information Systems Plan Calendars are Sysnchronized
- [ ] Line and Staff Managers Participate Actively in Information Systems Planning
- [ ] Other _____

_____

_____

8. BENEFITS:

What are the benefits you have derived from having integrated planning? (Check those which apply)

- [ ] Management Performance is Monitored Against the Business Plan
- [ ] Effective Resource Prioritization
- [ ] Reduced Costs of Information Systems Through Planning and Coordination
- [ ] Information Systems Clearly Supports Business Goals/Objectives
- [ ] Other _____

_____

_____

_____

_____

9. CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

_____

_____

_____

10. PARTICIPANTS:

Who participates in integrated planning and what are their roles? (Check those which apply)

ROLE

- ☐ Information Systems Management _____
- ☐ Information Systems Planner _____
- ☐ Business Planner _____
- ☐ Line Management _____
- ☐ General Management _____
- ☐ Other _____ _____

11. RESOURCES:

What are the required resources?

How much time is required? _____

_____

Do you use an outside consultant? ☐ Yes ☐ No

In Yes than Who? _____

Do you recommend any books or seminars? ☐ Yes ☐ No

If Yes than which Ones? _____

_____

12. METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology?

☐ Yes ☐ No Go to 13

Which those applicable (check one)

☐ Business Systems Planning from IBM

☐ Critical Success Factors from MIT

☐ Internally Developed Methodology

☐ Other _____

_____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

☐ Yes ☐ No Go to 13

What are the deficiencies? (For each Methodoly)

METHODOLOGY	DEFICIENCY

13. INTEGRATED METHOLOLOGY:

How would you characterize your methodology for integrating? (How have you integrated Information Systems Planning and Business Planning?) (Check those which apply)

- [ ] Planning Sessions
- [ ] Joint Study Teams
- [ ] Integrated Systems Planning with the Budget Process
- [ ] Developed Guidelines for Line Managers to Develop Their Information Systems Plan With Their Business Plan
- [ ] (If any apply - ask what does it cover or could we get a copy?)

_____

_____

_____

_____

_____

- [ ] Other _____

_____

_____

14. DOCUMENTATION RESULTS

What are the results or documentation of the Integrated Planning effort? (Check those which apply)

☐ "A" Plan — What is the table of contents or could we get a copy?

_____

_____

☐ An Information Systems Annual Report

What is the table of contents or could we get a copy?

_____

_____

☐ Other (and can we get a copy?) _____

_____

_____

15. PAYBACK:

Is there a specific payback you have achieved? (We would like to develop a case study in more depth)

☐ Yes

☐ No

End the interview - (Make sure you have address to send respondent summary)

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO U C P L
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATE MM DD YY

STUDY TITLE:

TYPE OF INTERVIEW: ☐ VENDOR ☐ TELEPHONE
☐ USER ☐ ON-SITE
☐ MAIL

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL.: _____

_____

_____

INDUSTRY ☐

☐ DISCRETE MANUFACTURING ☐ UTILITIES ☐ INSURANCE
☐ PROCESS MANUFACTURING ☐ RETAIL ☐ GOVERNMENT- FEDERAL
☐ TRANSPORTATION ☐ BANKING ☐ GOVERNMENT-STATE & LOCAL
☐ MEDICAL ☐ WHOLESALE ☐ EDUCATION
☐ SERVICES ☐ OTHER

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

_____

_____

_____

REFERENCES

_____

_____

_____

CATALOG NO. UCPL

TOPIC STATEMENT: We are writing a report on integrating information systems planning and business planning and would like to ask you some questions. The questions will take no more than 15 minutes to answer. For your assistance, we will send you a copy of the respondent summary of the report.

RESPONDENT FUNCTION: (Check one)

- ☐ Information Systems Management
- ☐ Business Planner
- ☐ Information Systems Planner
- ☐ General Management

1. CENTRALIZED or DECENTRALIZED:

We want to know how to characterize your company as centralized or decentralized in terms of information systems and business planning.

Is your Information Systems function centralized or decentralized?

☐ Centralized ☐ Decentralized

Does that mean your business planning is also centralized or decentralized?

☐ Centralized ☐ Decentralized

If decentralized, is there any corporate consolidation?

☐ Yes ☐ No

2. ISSUES:

What major issues are you addressing? (Check those which apply)

BUSINESS PLANNER or GENERAL MANAGEMENT

- ☐ Productivity
- ☐ Economic Downturn
- ☐ Other _____

_____

_____

INFORMATION SYSTEMS

- ☐ Manpower Planning and Development
- ☐ Capacity Planning
- ☐ System Architecture
- ☐ Microcomputer Proliferation
- ☐ Other _____

_____

_____

3. PLANS:

Do you have an Information Systems Plan? ☐ Yes ☐ No

If No - (terminate interview) _____

_____

Do you have an business plan? (Either formal or informal) ☐ Yes ☐ No

If No - (terminate interview) _____

_____

Do you believe you have an INTEGRATED Information Systems and Business Plan?

☐ Yes Go to **B**

☐ No Go to **A**

A NO - Integrated Information Systems Plan and Business Plan

4. Do you believe the two should be integrated? ☐ Yes ☐ No

   Why or Why Not? _____

   _____

   _____

5. INPEDIMENTS:

   What are the reasons or impediments to not integrating? (Check those which apply)

   ☐ Lack of Top Management Support

   ☐ Staff Constraints

   ☐ Time Constraints

   ☐ Don't Know Why We Should Integrate (Don't know the benefits)

   ☐ Don't Know How to Integrate

   ☐ Other _____

   What do you feel the results of not integrating have been? (Check those which apply)

   ☐ Ineffective Resource Prioritization

   ☐ Information Systems Does Not Clearly Support Business Goals

   ☐ Increased Costs of Information Systems Development

   ☐ Other _____

   _____

   _____

6. METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology?

☐ Yes

☐ No (End the Interview)

Which one? (Check one)

☐ Business Systems Planning from IBM

☐ Critical Success Factors from MIT

☐ Internally Developed Methodology

☐ Other _____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

☐ Yes

☐ No (End the Interview)

What are the deficiencies? _____

_____

_____

_____

End the interview (Make sure you have address to send respondent summary)

B YES - Integrated Information Systems Plan and Business Plan

7. DEFINITION:

How do you define and characterize an integrated Information Systems and Business Plan? (Check those which apply)

- [ ] The Business Plan States the Information Systems Needs
- [ ] Business Plan and Information Systems Plan Calendars are Sysnchronized
- [ ] Line and Staff Managers Participate Actively in Information Systems Planning
- [ ] Other _____

_____

_____

8. BENEFITS:

What are the benefits you have derived from having integrated planning? (Check those which apply)

- [ ] Management Performance is Monitored Against the Business Plan
- [ ] Effective Resource Prioritization
- [ ] Reduced Costs of Information Systems Through Planning and Coordination
- [ ] Information Systems Clearly Supports Business Goals/Objectives
- [ ] Other _____

_____

_____

_____

_____

9. CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

_____

_____

_____

10. PARTICIPANTS:

Who participates in integrated planning and what are their roles? (Check those which apply)

ROLE

- ☐ Information Systems Management _____
- ☐ Information Systems Planner _____
- ☐ Business Planner _____
- ☐ Line Management _____
- ☐ General Management _____
- ☐ Other _____ _____

11. RESOURCES:

What are the required resources?

How much time is required? _____

_____

Do you use an outside consultant? ☐ Yes ☐ No

In Yes than Who? _____

Do you recommend any books or seminars? ☐ Yes ☐ No

If Yes than which Ones? _____

_____

12. METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology?

☐ Yes ☐ No Go to 13

Which those applicable (check one)

☐ Business Systems Planning from IBM

☐ Critical Success Factors from MIT

☐ Internally Developed Methodology

☐ Other _____

_____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

☐ Yes ☐ No Go to 13

What are the deficiencies? (For each Methodoly)

METHODOLOGY	DEFICIENCY

13. INTEGRATED METHOLOLOGY:

How would you characterize your methodology for integrating? (How have you integrated Information Systems Planning and Business Planning?) (Check those which apply)

- [ ] Planning Sessions
- [ ] Joint Study Teams
- [ ] Integrated Systems Planning with the Budget Process
- [ ] Developed Guidelines for Line Managers to Develop Their Information Systems Plan With Their Business Plan
- [ ] (If any apply - ask what does it cover or could we get a copy?)

_____

_____

_____

_____

_____

- [ ] Other _____

_____

_____

14. DOCUMENTATION RESULTS

What are the results or documentation of the Integrated Planning effort? (Check those which apply)

☐ "A" Plan — What is the table of contents or could we get a copy?

_____

_____

☐ An Information Systems Annual Report

What is the table of contents or could we get a copy?

_____

_____

☐ Other (and can we get a copy?) _____

_____

_____

15. PAYBACK:

Is there a specific payback you have achieved? (We would like to develop a case study in more depth)

☐ Yes

☐ No

End the interview - (Make sure you have address to send respondent summary)

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO U C P L
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATE
MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ TELEPHONE
☐ USER ☐ ON-SITE
☐ MAIL

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL.: _____

_____

_____

INDUSTRY ☐

☐ DISCRETE MANUFACTURING
☐ PROCESS MANUFACTURING
☐ TRANSPORTATION
☐ MEDICAL
☐ SERVICES
☐ UTILITIES
☐ RETAIL
☐ BANKING
☐ WHOLESALE
☐ OTHER
☐ INSURANCE
☐ GOVERNMENT- FEDERAL
☐ GOVERNMENT-STATE & LOCAL
☐ EDUCATION

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

_____

_____

_____

REFERENCES

_____

_____

_____

CATALOG NO. UCPL

TOPIC STATEMENT: We are writing a report on integrating information systems planning and business planning and would like to ask you some questions. The questions will take no more than 15 minutes to answer. For your assistance, we will send you a copy of the respondent summary of the report.

RESPONDENT FUNCTION: (Check one)

- ☐ Information Systems Management
- ☐ Business Planner
- ☐ Information Systems Planner
- ☐ General Management

1. CENTRALIZED or DECENTRALIZED:

We want to know how to characterize your company as centralized or decentralized in terms of information systems and business planning.

Is your Information Systems function centralized or decentralized?

☐ Centralized ☐ Decentralized

Does that mean your business planning is also centralized or decentralized?

☐ Centralized ☐ Decentralized

If decentralized, is there any corporate consolidation?

☐ Yes ☐ No

2. ISSUES:

What major issues are you addressing? (Check those which apply)

BUSINESS PLANNER or GENERAL MANAGEMENT

- ☐ Productivity
- ☐ Economic Downturn
- ☐ Other _____

_____

_____

INFORMATION SYSTEMS

- ☐ Manpower Planning and Development
- ☐ Capacity Planning
- ☐ System Architecture
- ☐ Microcomputer Proliferation
- ☐ Other _____

_____

_____

3. PLANS:

Do you have an Information Systems Plan? ☐ Yes ☐ No

If No - (terminate interview) _____

_____

Do you have an business plan? (Either formal or informal) ☐ Yes ☐ No

If No - (terminate interview) _____

_____

Do you believe you have an INTEGRATED Information Systems and Business Plan?

☐ Yes Go to **B**

☐ No Go to **A**

A NO - Integrated Information Systems Plan and Business Plan

4. Do you believe the two should be integrated? ☐ Yes ☐ No

   Why or Why Not? _____

   _____

   _____

5. INPEDIMENTS:

   What are the reasons or impediments to not integrating? (Check those which apply)

   ☐ Lack of Top Management Support

   ☐ Staff Constraints

   ☐ Time Constraints

   ☐ Don't Know Why We Should Integrate (Don't know the benefits)

   ☐ Don't Know How to Integrate

   ☐ Other _____

   What do you feel the results of not integrating have been? (Check those which apply)

   ☐ Ineffective Resource Prioritization

   ☐ Information Systems Does Not Clearly Support Business Goals

   ☐ Increased Costs of Information Systems Development

   ☐ Other _____

   _____

   _____

6. METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology?

☐ Yes

☐ No (End the Interview)

Which one? (Check one)

☐ Business Systems Planning from IBM

☐ Critical Success Factors from MIT

☐ Internally Developed Methodology

☐ Other _____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

☐ Yes

☐ No (End the Interview)

What are the deficiencies? _____

_____

_____

_____

End the interview (Make sure you have address to send respondent summary)

B YES - Integrated Information Systems Plan and Business Plan

7. DEFINITION:

How do you define and characterize an integrated Information Systems and Business Plan? (Check those which apply)

- [ ] The Business Plan States the Information Systems Needs
- [ ] Business Plan and Information Systems Plan Calendars are Sysnchronized
- [ ] Line and Staff Managers Participate Actively in Information Systems Planning
- [ ] Other _____

_____

_____

8. BENEFITS:

What are the benefits you have derived from having integrated planning? (Check those which apply)

- [ ] Management Performance is Monitored Against the Business Plan
- [ ] Effective Resource Prioritization
- [ ] Reduced Costs of Information Systems Through Planning and Coordination
- [ ] Information Systems Clearly Supports Business Goals/Objectives
- [ ] Other _____

_____

_____

_____

_____

9. CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

_____

_____

_____

10. PARTICIPANTS:

Who participates in integrated planning and what are their roles? (Check those which apply)

ROLE

- ☐ Information Systems Management _____
- ☐ Information Systems Planner _____
- ☐ Business Planner _____
- ☐ Line Management _____
- ☐ General Management _____
- ☐ Other _____ _____

11. RESOURCES:

What are the required resources?

How much time is required? _____

_____

Do you use an outside consultant? ☐ Yes ☐ No

In Yes than Who? _____

Do you recommend any books or seminars? ☐ Yes ☐ No

If Yes than which Ones? _____

_____

12. METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology?

☐ Yes ☐ No Go to 13

Which those applicable (check one)

☐ Business Systems Planning from IBM

☐ Critical Success Factors from MIT

☐ Internally Developed Methodology

☐ Other _____

_____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

☐ Yes ☐ No Go to 13

What are the deficiencies? (For each Methodoly)

METHODOLOGY	DEFICIENCY

13. INTEGRATED METHOLOLOGY:

How would you characterize your methodology for integrating? (How have you integrated Information Systems Planning and Business Planning?) (Check those which apply)

- [ ] Planning Sessions
- [ ] Joint Study Teams
- [ ] Integrated Systems Planning with the Budget Process
- [ ] Developed Guidelines for Line Managers to Develop Their Information Systems Plan With Their Business Plan
- [ ] (If any apply - ask what does it cover or could we get a copy?)

_____

_____

_____

_____

_____

- [ ] Other _____

_____

_____

14. DOCUMENTATION RESULTS

What are the results or documentation of the Integrated Planning effort? (Check those which apply)

☐ "A" Plan — What is the table of contents or could we get a copy?

_____

_____

☐ An Information Systems Annual Report

What is the table of contents or could we get a copy?

_____

_____

☐ Other (and can we get a copy?) _____

_____

_____

15. PAYBACK:

Is there a specific payback you have achieved? (We would like to develop a case study in more depth)

☐ Yes

☐ No

End the interview - (Make sure you have address to send respondent summary)

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATE
MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ USER ☐ TELEPHONE ☐ ON-SITE ☐ MAIL

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL: _____

_____

_____

INDUSTRY ☐

☐ DISCRETE MANUFACTURING
☐ PROCESS MANUFACTURING
☐ TRANSPORTATION
☐ MEDICAL
☐ SERVICES
☐ UTILITIES
☐ RETAIL
☐ BANKING
☐ WHOLESALE
☐ OTHER
☐ INSURANCE
☐ GOVERNMENT- FEDERAL
☐ GOVERNMENT-STATE & LOCAL
☐ EDUCATION

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

REFERENCES

5 Copies
return orig
to Steve K

Jud. Berman
10 interviews

TOPIC STATEMENT: We are writing a report on integrating information systems planning and business planning and would like to ask you some questions. The questions will take no more than 15 minutes to answer. For your assistance, we will send you a copy of the respondent summary of the report.

RESPONDENT FUNCTION: (Check one)

Information Systems Management _____

Business Planner _____

Information Systems Planner _____

General Management _____

1 CENTRALIZED or DECENTRALIZED:

We want to know how to characterize your company as centralized or decentralized in terms of information systems and business planning.

Is your Information Systems function centralized or decentralized?

D or C (Circle One)

Does that mean your business planning is also centralized or decentralized? D or C (Circle One)

If decentralized is there any corporate consolidation?

Y or N (Circle One)

(2) ISSUES:

What major issues are you addressing? (Check those which apply)

BUSINESS PLANNER or Kennel Management

Productivity

Economic downturn

Other _____

_____

_____

INFORMATION SYSTEMS

Manpower planning and development

Capacity planning

System architecture

Microcomputer proliferation

_____

_____

_____

(3) PLANS:

Do you have an Information Systems Plan? Yes

If No - WHY NOT and terminate interview

Do you have a business plan? (Either formal or informal) Yes

If no - WHY NOT and terminate interview

Do you believe you have an INTEGRATED Information Systems and Business Plan? Yes Go To B

No Go To A

A. NO INTEGRATED INFORMATION SYSTEMS PLAN AND BUSINESS PLAN

4 Do you believe the two should be integrated? Yes ~~Go To~~ 5

No Why? Why Not?

_____

_____

_____

5 IMPEDIMENTS:

What are the reasons or impediments to not integrating? (Check those which apply)

Lack of top management support

Staff constraints

Time constraints

Don't know why we should integrate (don't know the benefits)

Don't know how to integrate

Other _____

What do you feel the results of not integrating have been? (Check those which apply)

Ineffective resource prioritization

Information Systems does not clearly support business goals

Increased costs of Information Systems development

Other _____

_____

_____

6 METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology? No End the interview

Yes

Which one? (Check one)

Business Systems Planning from IBM

Critical Success Factors from MIT

Internally developed methodology

Other _____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

No End the interview

Yes

What are the deficiencies?

_____

_____

_____

End the interview (make sure you have address to send ~~executive~~ respondent summary)

B. YES - INTEGRATED INFORMATION SYSTEMS PLAN AND BUSINESS PLAN

7 DEFINITION:

How do you define and characterize an integrated Information Systems and Business Plan?

Check those which apply)

The business plan states the Information Systems needs

Business plan and Information Systems plan calendars are synchronized

Line and staff managers participate actively in Information Systems planning

Other:

_____

_____

_____

8 BENEFITS:

What are the benefits you have derived from having integrated planning?

(Check those which apply)

Management performance is monitored against the business plan

Effective resource prioritization

Reduced costs of Information Systems through planning and coordination

Information Systems clearly supports business goals/objectives

Other _____

_____

_____

_____

_____

9 CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

_____

_____

_____

(10) PARTICIPANTS:

Who participates in integrated planning and what are their roles?

(Check those which apply)	ROLE
Information systems management	_____
	_____
Information systems planner	_____
	_____
Business planner	_____
	_____
Line management	_____
	_____
General management	_____
	_____
Other _____	_____
	_____

(11) RESOURCES:

What are the required resources?

How much time is required? _____

_____

Do you use an outside consultant? No

Yes Who _____

Do you recommend any books or seminars? No

Yes _____

_____

(12) METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology? No Go To (13)

Yes

Which ~~one~~ those applicable? (Check one)

Business Systems Planning from IBM

Critical Success Factors from MIT

Internally developed methodology

Other _____

_____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

No Go To (13)

Yes

What are the deficiencies? (for each methodology)

Methodology Deficiency

_____

_____

_____

(13) INTEGRATED METHODOLOGY:

How would you characterize your methodology for integrating? (How have you integrated Information Systems Planning and Business Planning?) (Check those which apply)

Planning sessions

Joint study teams

Integrated systems planning with the budget process

Developed guidelines for line managers to develop their Information Systems plan with their business plan

(If YES - ask what does it cover or could we get a copy?

_____

_____

_____

_____

Other _____

_____

_____

14 DOCUMENTATION RESULTS

What are the results or documentation of the integrated planning effort? (Check those which apply)

A plan What is the table of contents or could we get a copy?

_____

_____

An Information Systems annual report

What is the table of contents or could we get a copy?

_____

_____

Other (and can we get a copy?)_____

_____

_____

15 PAYBACK:

Is there a specific payback you have achieved? (We would like to develop a case study in more depth.) No

Yes

End the interview - make sure you have address to send executive summary

TOPIC STATEMENT: We are writing a report on integrating information systems planning and business planning and would like to ask you some questions. The questions will take no more than 15 minutes to answer. For your assistance, we will send you a copy of the respondent summary of the report.

RESPONDENT FUNCTION: (Check one)

Information Systems Management _____

Business Planner _____

Information Systems Planner _____

General Management _____

1 CENTRALIZED or DECENTRALIZED:

We want to know how to characterize your company as centralized or decentralized in terms of information systems and business planning.

Is your Information Systems function centralized or decentralized?

D or C (Circle One)

Does that mean your business planning is also centralized or decentralized? D or C (Circle One)

If decentralized is there any corporate consolidation?

Y or N (Circle One)

(2) ISSUES:

What major issues are you addressing? (Check those which apply)

BUSINESS PLANNER or Annual Management

Productivity

Economic downturn

Other _____

_____

_____

INFORMATION SYSTEMS

Manpower planning and development

Capacity planning

System architecture

Microcomputer proliferation

_____

_____

_____

(3) PLANS:

Do you have an Information Systems Plan? Yes

If No - WHY NOT and terminate interview

Do you have a business plan? (Either formal or informal) Yes

If no - WHY NOT and terminate interview

Do you believe you have an INTEGRATED Information Systems and Business Plan? Yes Go To B

No Go To A

(A.) NO INTEGRATED INFORMATION SYSTEMS PLAN AND BUSINESS PLAN

(4) Do you believe the two should be integrated? Yes ~~Go To~~ (5)

No Why? Why Not?

_____

_____

_____

(5) IMPEDIMENTS:

What are the reasons or impediments to not integrating? (Check those which apply)

Lack of top management support

Staff constraints

Time constraints

Don't know why we should integrate (don't know the benefits)

Don't know how to integrate

Other _____

What do you feel the results of not integrating have been? (Check those which apply)

Ineffective resource prioritization

Information Systems does not clearly support business goals

Increased costs of Information Systems development

Other _____

_____

_____

6 METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology? No End the interview

Yes

Which one? (Check one)

Business Systems Planning from IBM

Critical Success Factors from MIT

Internally developed methodology

Other _____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

No End the interview

Yes

What are the deficiencies?

_____

_____

_____

End the interview (make sure you have address to send ~~executive~~ respondent summary)

B. YES - INTEGRATED INFORMATION SYSTEMS PLAN AND BUSINESS PLAN

7 DEFINITION:

How do you define and characterize an integrated Information Systems and Business Plan?

Check those which apply)

The business plan states the Information Systems needs

Business plan and Information Systems plan calendars are synchronized

Line and staff managers participate actively in Information Systems planning

Other:

_____

_____

_____

8 BENEFITS:

What are the benefits you have derived from having integrated planning?

(Check those which apply)

Management performance is monitored against the business plan

Effective resource prioritization

Reduced costs of Information Systems through planning and coordination

Information Systems clearly supports business goals/objectives

Other _____

_____

_____

_____

_____

9 CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

_____

_____

_____

10 PARTICIPANTS:

Who participates in integrated planning and what are their roles?

(Check those which apply) ROLE

Information systems management _____

_____

Information systems planner _____

_____

Business planner _____

_____

Line management _____

_____

General management _____

_____

Other _____ _____

_____

11 RESOURCES:

What are the required resources?

How much time is required? _____

_____

Do you use an outside consultant? No

Yes Who _____

Do you recommend any books or seminars? No

Yes _____

_____

(13) METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology? No Go To (13)

Yes

Which ~~one~~ those applicable? (Check one)

Business Systems Planning from IBM

Critical Success Factors from MIT

Internally developed methodology

Other _____

_____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

No Go To (13)

Yes

What are the deficiencies? (for each methodology)

Methodology Deficiency

_____

_____

_____

(13) INTEGRATED METHODOLOGY:

How would you characterize your methodology for integrating? (How have you integrated Information Systems Planning and Business Planning?) (Check those which apply)

Planning sessions

Joint study teams

Integrated systems planning with the budget process

Developed guidelines for line managers to develop their Information Systems plan with their business plan

(If YES - ask what does it cover or could we get a copy?

_____

_____

_____

_____

Other _____

_____

_____

(14) DOCUMENTATION RESULTS

What are the results or documentation of the integrated planning effort? (Check those which apply)

A plan — What is the table of contents or could we get a copy?

_____

_____

An Information Systems annual report — What is the table of contents or could we get a copy?

_____

_____

Other (and can we get a copy?)_____

_____

_____

(15) PAYBACK:

Is there a specific payback you have achieved? (We would like to develop a case study in more depth.) No

Yes

End the interview - make sure you have address to send executive summary

November 16, 1983

Mr. Jack Keen
INPUT
1943 Landings Drive
Mountain View, California 94043

Dear Jack:

It was good to talk to you yesterday. I look forward to the possibility of establishing some mutually beneficial relationship.

Attached are my SRI "bio" - the document used for proposal efforts and an expanded list of experience which you may find to be more specifically relevant to performing work for INPUT.

As I mentioned on the phone yesterday, I have a strong interest in the subject of implementation approaches. I have recently completed a report entitled "Managing the Transition to the Office of the Future - Balancing People and Technology". Some of my research efforts for that report introduced me to approaches such as sociotechnical system design and participative teams. I interviewed in many companies and began to see that there are certain factors of implementation which contribute to successful implementations. I believe that this is an area deserving more attention and one which will be of interest to many user organizations.

Looking forward to hearing from you. My phone number until the end of the year is 859-5540 during the day. My home phone number is 364-3764.

408-375-2969

Sincerely

Alexia Martin

Alexia Martin
~~412 8th Avenue~~
~~Menlo Park, California 94025~~
20311 Beatty Ridge
Los Gatos, Ca. 95030

NOV 18 1983

Alexis Martin

ALEXIA MARTIN

Management Systems Consultant to SRI
Office Automation Department
Electronics Industries Center

SPECIALIZED PROFESSIONAL COMPETENCE

Market, product, sales and support, and financial planning for office technology vendors; market research and analysis; planning, development, design, implementation, and management of office systems and management information systems; development of operational and user training materials

REPRESENTATIVE RESEARCH ASSIGNMENTS AT SRI

Research in office automation products/markets--general and industry specific

Developed market, sales, financial, and service plan for office automation system manufacturers

Requirements analysis and conceptual design of information systems in retail trade, insurance, and research industries

Development of long-range corporate plans for office support systems in financial, transportation, and manufacturing industries

Design of prototype automated insurance agents office

Reviewed and analyzed documentation materials in order to develop a quality improvement program for all documentation of a major computer manufacturer

PROFESSIONAL AND BUSINESS EXPERIENCE PRIOR TO SRI

Managed system development of a variety of financial and health care applications

Conducted computer and software conversions, integrated text and data processing

Performed feasibility studies for automation of various financial applications

Planned and designed a medical record distributed processing system

ACADEMIC BACKGROUND

B.A. in political science (1967), and graduate studies in industrial psychology, San Francisco State University

PUBLICATIONS AND PRESENTATIONS

"Office Automation: Issues and Strategies," SRI Business Intelligence Program, 1980; "The Human Connection," Administrative Management, 1982; Program Chairman for AFIPS Office Automation Conference, 1982; presentations on office automation to a variety of audiences including the National Academy of Science and the Japan Management Association; articles published by Auerbach, Administrative Management, and Information Resource Management

LANGUAGE PROFICIENCY

Speaking and reading knowledge of Spanish; working knowledge of French

NOV 18 1983

RELEVANT EXPERIENCE

Marketing consulting for SRI International including development of product, market, sales and financial plans for IBM, Fujitsu, Hitachi and Northern Telecom. Management of market research program sponsored by 18 U.S., Japanese, and European computer manufacturers such as IBM, AT&T, DEC, Xerox, Fujitsu and Plessey based on in-depth interviews and analysis within the Fortune 1000 user corporations

A sample of the work performed at SRI International includes:

- Long Range Office Automation Plan for TWA
- Analysis of insurance system network architectures
- Development of a prototype automated insurance agent system including functions and interface
- Market and user environment research and analysis for a major telecommunication vendor
- Review and analysis of the user market for "super" personal computers (32-bit processors) entailing in-depth interviews with sophisticated system users for a major computer manufacturer

Market advising as an independent consultant to startups and established computer manufacturers such as SYDIS, Chase Scientific, and Northern Telecom

Chairperson for 1982 Office Automation Conference - Integration Issues. This position entailed planning the integration track, identifying potential speakers, contacting speakers and monitoring their progress. The integration track drew the largest audience of all the tracks in 1982.

Writer and invited speaker on human factors and impacts of office automation for the National Academy of Science, SRI International, United Nations, Japanese Management Association, Information Resource Management magazine, Office Automation and Administration,- Auerbach and others.

Computer system development and development of end user training material in financial, health care and computer services industries for Bank of America, Western Operations, Life/Equity Information and Stanford University Hospital.

Alexia Martin
12-8-83

Available
Exec WS Some Time in January : W1, W3, W4

Exec WS Acceptance

Did MIC - 30 co ITV - face-to-face
Features
Implementation
Guidelines
Etc.

Expe: Managing People + Technology
XDSS : DSS ← discovered inst banking
MPMA : ESS
VEXE

UPLA: Planning Integration
Covered extensively in recent
My background more IS than OS
Used BSP-IBM

Strength = network of contacts

Interest = Automation Implementation Approaches

NX
① Call Alexia re: NCT Tues 12.13

Alexis Martin

quit - SRI

Aidan Valenti [redacted]

contract consultant w/ SRI 11-15-83

end of year

topic interest W = 859-5540

Office Automation [redacted]

H = 415-364-3764

- Human Issue

- Implementation Approaches

Ongoing relationship = desired

like writing

Open

$50/hour - ballpark - up/down

Available - end of Jan

= 2 weeks/month

Prefer ext cons

have full-time = possible

will stay indep - no start

ADV = contact

= OA Conf

Focus = Sys Implementation

INT = Sales Leads

(NX) AM send bio

Alexia
1-4-84

TWA: LR Sys Plan: partic. part
esp OS integration

FF: Agency Auto: Sys Design

SRI: Electronic Ind
NoTel - set up mkt res activities - Manage 17 people
Hitachi - early user expn of Supercomputer

≈1979+ - OA Focus
Vendor focus

3 Day Seminar - Superior O.I
How develop a long range plan strategy for OA

IS Plan

A. M
1-4-84

Implications of EUC
- ATM Divestiture

Driving Forces
Ind. Upheaval

Cost Control - Chargeback

Issues
- How make ongoing plan methods
- Systems/Packaged Approval
- How Much / How Far?
- Top Mgt concern
- Payoffs - cases
- Examples: Table of Contents - both plans
- Selling IS

I = Linkage
Net = Critical Success Factors - HBR eg BSP
= CSF = Brochure = IS Plan

~~2-23rd - 2-24 = First Draft~~

Specs = Finalized By 1-24 ✓
Client Poll Done =
Rough draft Specs = 1-18th
Report - First Draft = ~~2-27th~~ 2-27th
Final Draft = ~~2-29th~~ 3-5 Mon

J

Alexia Martin
January 18, 1984

References Required for PLANNING report

1. Latest version of IBM Business System Planning - IS Planning Guide (GE20-0527-1 - 1st edition, 1975)

2. Latest version of Critical Success Factors method from MIT - probably from Sloan School.

   Also, written up in Harvard Business Review by John Rockart sometime in 1979. "Execs define their needs".

3. "Planning your Future IS", EDP ANALYZER, Janury, 1983

4. Nolan and Gibson, HARVARD BUSINESS REVIEW, January, 1974

5. Nolan, HARVARD BUSINESS REVIEW, March, 1979.

* Articles on Information Systems Planning -- methodologies, models, issues, etc. from the following periodicals

MIS QUARTERLY

HARVARD BUSINESS REVIEW

COMPUTER DECISIONS

INFOSYSTEMS

Information Systems Planning & Modeling

Annual Q. - Annual Report
telephone Bud, Planning, Exp, Prob/Obj
Mail indication of lead edgeness

Alexia Martin - Standard Contract + Exhibit A

$3850 upon completion + $350 bonus
1st draft 2-27 final 3-5
All deliverables
terms of agreement through 12-31-84
Standard agreement from Jam M.

Specs finalized and approved 1-24

[14 ESMD @ $275
14 ESMD @ $25 Bonus]

ESMD
1 Client Pall
1 Specs
6 interviews (6 on site, 15 phone)
21 interviews

6 writing
14 50 page

Input
1 Specs
1 Mgmt
2 Interview 10 interviews
1 Tab
1 Qc
6

The interview mix may change but total
the number of on-site vs telephone interviews may be changed with
the prior approval of the program manager.

20311 Beatty Ridge
Los Gatos, Ca. 95030

Alexia Martin

Non Input Work Commitments Through 3-5-84

- Datagenet - Users Issues - 8 items

Cost justification

Training & Support

IRM

Org. Structural Changes

Executive Readiness

User Interface

Requirements Analysis

Implementation Approaches

- Participative Design

- Socio-technical systems design

Integrated Office System

Delivery Date 1-16-84 - after 1-18-84 just QC.

- SRI - Office Automation Opportunities

TOPIC STATEMENT: We are writing a report on integrating information systems planning and business planning and would like to ask you some questions. The questions will take no more than 15 minutes to answer. For your assistance, we will send you a copy of the ~~executive~~ Respondent summary of the report.

RESPONDENT FUNCTION: (Check one)

Information Systems Management _____

Business Planner _____

Information Systems Planner _____

General Management _____

1 CENTRALIZED or DECENTRALIZED:

We want to know how to characterize your company as centralized or decentralized in terms of information systems and business planning.

Is your Information Systems function centralized or decentralized?

D or C (Circle One)

Does that mean your business planning is also centralized or decentralized? D or C (Circle One)

If decentralized is there any corporate consolidation?

Y or N (Circle One)

② ISSUES:

What major issues are you addressing? (Check those which apply)

BUSINESS PLANNER

Productivity

Economic downturn

Other _____

_____

_____

INFORMATION SYSTEMS

Manpower planning and development

Capacity planning

System architecture

Microcomputer proliferation

_____

_____

_____

③ PLANS:

Do you have an Information Systems Plan? Yes

If No - WHY NOT and terminate interview

Do you have a business plan? (Either formal or informal) Yes

If no - WHY NOT and terminate interview

Do you believe you have an INTEGRATED Information Systems and Business Plan? Yes Go To Section B

No Go To Section A

NO INTEGRATED INFORMATION SYSTEMS PLAN AND BUSINESS PLAN

4 Do you believe the two should be integrated? Yes Go To 5

No Why Not?

_____

_____

_____

5 IMPEDIMENTS:

What are the reasons or impediments to not integrating? (Check those which apply)

Lack of top management support

Staff constraints

Time constraints

Don't know why we should integrate (don't know the benefits)

Don't know how to integrate

Other _____

What do you feel the results of not integrating have been? (Check those which apply)

Ineffective resource prioritization

Information Systems does not clearly support business goals

Increased costs of Information Systems development

Other _____

_____

_____

6 METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology? No End the interview

Yes

Which one? (Check one)

Business Systems Planning from IBM

Critical Success Factors from MIT

Internally developed methodology

Other _____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

No End the interview

Yes

What are the deficiencies?

_____

_____

_____

End the interview (make sure you have address to send ~~executive~~ respondent summary)

5. YES - INTEGRATED INFORMATION SYSTEMS PLAN AND BUSINESS PLAN

7. DEFINITION:

How do you define and characterize an integrated Information Systems and Business Plan?

Check those which apply)

The busines plan states the Information Systems needs

Business plan and Information Systems plan calendars are synchronized

Line and staff managers participate actively in Information Systems planning

Other:

_____

_____

_____

(8) BENEFITS:

What are the benefits you have derived from having integrated planning?

(Check those which apply)

Management performance is monitored against the business plan

Effective resource prioritization

Reduced costs of Information Systems through planning and coordination

Information Systems clearly supports business goals/objectives

Other _____

_____

_____

_____

_____

(9) CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

_____

_____

_____

(10) PARTICIPANTS:

Who participates in integrated planning and what are their roles?

(Check those which apply)	ROLE
Information systems management	_____
	_____
Information systems planner	_____
	_____
Business planner	_____
	_____
Line management	_____
	_____
General management	_____
	_____
Other _____	_____
	_____

(11) RESOURCES:

What are the required resources?

How much time is required? _____

_____

Do you use an outside consultant? No

Yes Who _____

Do you recommend any books or seminars? No

Yes _____

_____

(12) METHODOLOGIES:

Do you (or did you ever) use any Information Systems Planning Methodology? No Go To (13)

Yes

Which one? (Check one)

Business Systems Planning from IBM

Critical Success Factors from MIT

Internally developed methodology

Other _____

_____

Do you think there are deficiencies in the methodology you used, in terms of not promoting integration?

No Go To (13)

Yes

What are the deficiencies?

_____

_____

_____

(13) INTEGRATED METHODOLOGY:

How would you characterize your methodology for integrating? (How have you integrated Information Systems Planning and Business Planning?) (Check those which apply)

- Planning sessions
- Joint study teams
- Integrated systems planning with the budget process
- Developed guidelines for line managers to develop their Information Systems plan with their business plan
  (If YES - ask what does it cover or could we get a copy?

  _____

  _____

  _____

  _____

- Other _____

  _____

  _____

(14) DOCUMENTATION RESULTS

What are the results or documentation of the integrated planning effort? (Check those which apply)

A plan — What is the table of contents or could we get a copy?

_____

_____

An Information Systems annual report — What is the table of contents or could we get a copy?

_____

_____

Other (and can we get a copy?)_____

_____

_____

(15) PAYBACK:

Is there a specific payback you have achieved? (We would like to develop a case study in more depth.) No

Yes

End the interview - make sure you have address to send executive summary

Call & leave message

Steve

Call me & tell me if I should include the whole PLAN for the one company (it will need sanitizing to remove references to the company). Also, do you want the whole Annual Report? Again needs clean up.

Also - where is orig. of

Strassman article?

See you Monday
in PM

Alexia

©1981 by INPUT. Reprodu

TABLE OF CONTENTS

I. INTRODUCTION

A. Objective, Audience and Need
B. Scope
C. Methodology
D. Other Related INPUT Reports

II. EXECUTIVE SUMMARY

A. Definition, Benefits, and Impediments
B. Convincing Top Management
C. Participants and Resources Needed
D. Use of Traditional IS Methodologies
E. Keys to Success
F. Documentation
G. Recommendations

III. THE NEED AND THE IMPEDIMENTS

A. Why Plan IS At All?

1. Background
2. Issues

B. What are the Benefits of Integrated IS and Business Planning?
C. Definition and Characterization of Integrated Planning
D. Why do Companies not Integrate and What are the Results?

1. Impediments to integrating planning
2. Results of not integrating

IV. HOW TO INTEGRATE PLANNING EFFORTS

A. Convincing Top Management
B. Who Should Participate in Integrated Planning?
C. What are the Required Resources?
D. Can You Use IS Planning Methodologies?

1. Business Systems Planning Methodology
2. Critical Success Factors
3. SRI - IS Strategic Planning Process

E. WHAT WORKS?

1. Keys to Success
2. Planning Process - variables and steps

V. DOCUMENTATION OF INTEGRATED PLANNING

A. The Plan

1. One Single Plan
2. A Separate IS Plan

B. IS Annual Report
C. IS Guidelines for Line Managers

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions
B. Recommendations
C. Caveats

TABLES AND FIGURES

TABLES

I. Industry and Planning Profile of Respondents
II. Respondent Profile - Positions
III. State of Integration
IV. Issues Identified by Business Planners
V. Issues Identified by IS Planners
VI. Benefits of Integrated Planning
VII. Definitions and Characterization of Integrated Planning
VIII. Impediments to Integrated Planning
IX. Results of not Integrating
X. Convincing Top Management
XI. Integrated Planning Participants and Roles
XII. Resources - Consultants, Books, Seminars
XIII. Methodologies Used
XIV. The Three Level Impacts of IS - industry, firm and strategy
XV. Documentation of Results

FIGURES

1 SRI - IS Strategic Planning Process
2 SRI - Develop IS Strategic Plan
3 Planning Horizons
4 Planning Steps
5 Planning Assumptions and Model for Company ABC

EXAMPLES

1 IS Annual Report
2 IS Planning Guidelines

I. INTRODUCTION

- This report is part of INPUT's Information Systems Program (ISP). It describes approaches to achieving an integrated information systems (IS) and corporate business planning process such that the full benefits of information technology can be achieved. It describes the need, the impediments, methodologies and results of an integrated planning effort. It recommends integration approaches and plan and other documentation contents reflecting an integrated approach.

A. OBJECTIVE, AUDIENCE AND NEED

- The objective of this report is to assist systems and planning management to integrate IS with the corporate business plan in order to achieve the fullest benefits of information technology application. (It will do this by discussing methodologies used by companies with an integrated planning process, by discussing the benefits, and through recommendations for plan and other documentation results of the planning process, integration approaches and actions to integrate.)

- This report will be of interest to the following people:

  - IS management

  - IS planners

- Corporate business planners

- At the INPUT 1983 Client Conference, clients expressed an interest in how to integrate IS and business planning in order to more fully benefit from information technology application.

B. SCOPE

- The research for this report focused on the following:

  - The needs and benefits of integrated systems and business planning.

  - The impediments, reasons, and results of not integrating.

  - How to integrate planning efforts in terms of:

    --Convincing top management
    --Required resources
    --Traditional IS planning methodologies
    --Integrated planning approaches

  - The formal and informal documented results of the integrated planning effort.

- This report excludes:

- In depth discussion of specific industry directions

- In depth discussion of business planning

- Planning is discussed from the following perspectives:

  - Generic systems planning, with no rigorous distinction between strategic, long range planning, or tactical planning

  - Planning from the corporate IS perspective rather than from decentralized IS perspectives.

- This report addresses the following major issues:

  - How can IS be a complement and enhancement to the business?

  - What is the definition and characteristics of integrated IS and corporate planning?

  - What are the benefits of integration of IS and corporate business planning?

  - What are the impediments to integrated planning?

  - What are the resources needed to perform integrated planning?

  - Who should be involved in integrated planning and what are their

roles?

- How do you get top management's approval?

- Is there a methodology for integrating IS and business planning?

- Should integrated planning requirements be rigid (structured and formal) or flexible?

- What are the formal and informal planning documents and others related to an integrated planning process?

C. METHODOLOGY

- The information for this report was gathered from the following sources:

  - 37 interviews with IS management, IS planners, business planners or general management in 33 companies with over 1,000 employees (See Table I - Industry and Planning Profile and Table II - Respondent Profile).

    --Seven of these were on-site interviews

    --26 were telephone interviews

- The state of planning and integration was:

  --All of these companies had an IS plan AND a business plan. (Interviews were terminated at over 10 companies which did not have both plans.)

  --24 of these companies stated they had an integrated or linked IS and business plan or planning process (See Table III - State of Integration).

- Review of literature search from INPUT files as well as of resources identified by respondents

- The questionnaire is contained in Appendix xxxx. (Please note different questions were asked depending on whether the respondent stated that the company had an integrated plan or planning process).

D. OTHER RELATED INPUT REPORTS

TABLE I - INDUSTRY AND PLANNING PROFILE OF RESPONDENTS

Industry	Respondent Function	Planning Characterization: Information Systems	Business	Consolidated	State of Integr.
Process Manufacturing	BP, GM	C	D	Y	I
Finance	ISP	C	C	N/A	N
Finance	ISP	C	C	N/A	N
Process Manufacturing	ISM	D	D	Y	I
Discrete Manufacturing	BP	C	C	N/A	I
Federal Government	ISM	C	D	N	N
Finance	GM	D	D	N	L
Services	BP, ISP	D	D	Y	L
Discrete Manufacturing	BP	C	D	Y	I
Discrete Manufacturing	ISM	C	C	N/A	I
Discrete Manufacturing	ISP	D	D	Y	N
Discrete Manufacturing	BP	C	D	Y	N
Services	GM	D	D	Y	I
Services	GM	C	D	Y	I
Process Manufacturing	ISP	D	D	Y	I
Finance	GM	C	D	Y	I
Services	ISP	D	D	Y	L
Process Manufacturing	ISP	D	D	Y	I
Process Manufacturing	ISM	C	C	N/A	I
Process Manufacturing	ISP	C	C	N/A	N
Process Manufacturing	ISM	C	C	N/A	I
Process Manufacturing	ISM	C	C	N/A	I
Process Manufacturing	ISM	C	C	N/A	I
Process Manufacturing	ISM	C	C	N/A	I
Process Manufacturing	ISM	D	C	N	N
Process Manufacturing	ISM	C	C	N/A	I
Process Manufacturing	ISM	C	C	N/A	I
Services	ISM	C	C	N/A	I
Process Manufacturing	ISM,ISM,ISP	C	D	N	I

Process Manufacturing	ISM	D	D	Y	I
Energy	ISP	D	D	Y	N
Utility	GM	C	C	N/A	I
Discrete Manufacturing	ISP	D	C	Y	N

TABLE II - RESPONDENT PROFILE - POSITIONS

	TOTAL
Information Systems Management	15
Business Planner	5
Information Systems Planner	11
General Management	6
	37

TABLE III - STATE OF INTEGRATION

	TOTAL
Integrated	21
Linked	3
Not Integrated	9
	37

II. EXECUTIVE SUMMARY

Ours is an age of uncertainty with an evolving economy and an uncertain future. The new environment will require that companies have highly efficient operations, marked by the integration and application of technology. The IS resources are strategic tools and can assist companies in meeting uncertainty. IS management must realize that they are agents of change due to the information technology explosion, and should place themselves in a position to plan and contribute to how changes will take place.

A. Definition, Benefits and Impediments

1. Definition

- Integrated IS and business planning can be characterized in terms of process and products.

- The acceptance of IS as a strategic tool is the primary characterization of integrated planning. At this point IS gains equal footing with financial, human, and facilities resources.

- Open communications between general management, line and services management, including IS, is common among companies with integrated planning. General management communicates business direction and objectives, and functional units, such as IS, communicate how they can contribute to meeting objectives.

- IS personnel participate actively in the planning of operational units and vice versa.

- The planning calendars of business units and IS are synchronized.

- Integrated planning is a "loop process" or a "marrying process" whereby the business plan allocates resources to IS and the IS plan allocates resources to the business units. The IS plan fulfills the business plan tactically, but also partially directs the business plan in terms of future financial resource requirements.

- The resultant plan may be one business plan which includes IS as a part or there may still be a separate IS plan. In either case, the plan serves as a document against which progress can be monitored.

2. Benefits

- The benefits of integrated IS and business planning are that IS clearly supports business goals and objectives; there are reduced costs of operations; payback is achieved from IS; there is more effective resource prioritization and utilization; and the plan can be used as an aid to insure accountability in meeting goals and objectives.

3. Impediments

- The impediments to integrated planning are: ineffective/inadequate communications (both vertically and horizontally); IS shows poor

accountability; companies are reorganizing or redeploying resources; and management does not understand the benefits of integrated planning which is really just a way of saying they do not understand that IS is a strategic resource.

B. Convincing Top Management

- Top management blessing is required to initiate and support integrated planning.

- Top management does not always need convincing - they are often the instigators of approaches which promote the effective use of IS.

- However, professional IS management that consistently and articulately educates management as to how IS can become a strategic tool assists in convincing not only top management, but line management as well.

- In the INPUT survey of 33 companies, several companies came to integrated planning after a bad experience, where, if IS had been included in the determination of business direction, the bad experience could have been avoided.

- However, if nothing is done, eventually the increasing computer literacy of staff will force top management to be more responsive to the company's IS needs and to promote integrating IS as a strategic resource into the business through integrated planning.

C. Participants and Resources Needed

- There is a wide cast of participants needed for integrated planning. (See Table XI).

- General management sets overall direction. IS and line management set functional and business directions, but each must contribute to the other's process. The IS and business planners perform studies in support of planning efforts and also consolidate planning efforts to achieve benefits of reduced redundancies and to identify common issues which can be addressed jointly or at a corporate level.

- Resources are available to assist in achieving integrated planning, in the form of consultants, books, and seminars. See Table XII.

D. Use of Traditional IS Methodologies

- Traditional IS planning methodologies such as IBM's Business Systems Planning (BSP) or Critical Success Factors (CSF) are appropriate for first time IS planning efforts. These offer a structured approach to planning.

- These methodologies are not necessarily intended to promote integrated

planning.

- In the INPUT survey, those companies with integrated planning had used a variety of approaches such as BSP and CSF for first time planning, but for integrated planning most had an internally developed methodology (IDM) which was a more adaptive approach.

- The IDM will vary in terms of structure and flexibility and will depend on the company's structure, corporate culture and management style.

- Three of the INPUT survey respondents were using an approach from SRI International, called IS Strategic Planning Process. While formal and structured, the approach promotes both on-going and integrated planning. There is a high degree of user and IS interaction and of feedback and looping. Corporate and middle management are called upon to identify critical business activities, review a future logical model, develop and approve the IS strategic plan, and select promising new technologies. Experiences of these 3 respondents shows that general and line management and IS personnel are working much more closely and synergistically, a key to intgrated planning.

E. Keys to Success

- The preconditions for integrated planning are:

  - Accountability - IS consistently meets budget and schedule commitments. IS reports on its accountability in status meetings, or

formally through a document such as the IS Annual Report.

- Distribution of IS - IS, perhaps along with finance and human resource functions, is distributed to the divisions to be supported thereby embedding IS functions into the line operations. This allows IS to better serve end users and promotes better understanding of the potential of IS.

- IS is seen as a strategic tool - Management knows how to assess the competitive impact of information technology. They see that information technology has an impact at the industry, firm and strategy levels.

- Open communications - Both vertical and horizontal communication channels are open. Top management and successive layers communicate on business directions, and communications across functions are easy (IS to end users and vice versa).

- Top management supporter - There is a sponsor to sell the integrated planning approach and to carry it out. The sponsor can be found in the business unit who has had a positive experience with IS.

- Planning calendars are synchronized - IS and business unit management prepare their plans at the same time and each feeds the other.

• The companies in the INPUT survey appeared to go through a series of phases prior to achieving an integrated planning process:

- No IS plan

- IS plans using BSP or some other methodology which begins by stating business objectives, and captures the requirements of business management. IS is reactive, but responsive to business requirements.

- IS achieves accountability - consistently meeting budget and schedule, and begins to publicize or in some way communicate both their accomplishments and their further potential of being a strategic tool.

- IS is distributed closer to user management. This act further serves to cross educate both IS and user organizations about each other's capabilities and needs.

- Corporate IS issues guidelines to distributed IS management for working with user management to prepare IS plans for the distributed IS activities. Corporate IS consolidates the results and identifies redundancies, if any, and addresses common issues.

- Corporate IS and distributed IS issue guidelines or communicates with business management on how to prepare the IS portion of their business plan. The resultant business plan includes a discrete system plan section for each line manager. Corporate IS and/or business planners consolidate the results and identifies redundancies and common issues.

- The business plan reflects systems along with capital, human resources and facilities - each resource is considered to have equal strategic importance. A separate IS plan may still exist to serve as a document against which to monitor.

F. Documentation

- The documented results of the planning process do not determine whether a company has integrated planning. There can be one single integrated plan or IS can still have a separate plan.

- The documentation should reflect that IS is considered a strategic resource just like capital, human resources, and facilities.

- The documentation should serve as a tool for monitoring progress.

- In the INPUT survey, 10 companies had a single plan, but in addition they had application development priority lists, and key project plans (networking, data base, and personal computing extensions).

G. Recommendations

- The onus is on IS to show a better understanding of their function

within the organization. They can begin by understanding the issues of the business, and defining their own issues in business terms, rather than technological terms. Issues held in common are much easier to address jointly through integrated planning.

- It is also up to IS to show how IS can be a strategic tool. IS can begin by looking at past business decisions which might have had a more profitable outcome if IS had been involved in the planning. In order to convey the strategic nature of IS, IS must play a consultative role. IS management is in the best position to tout the strategic nature of IS in management meetings. IS management and planners can use the framework in Table XIV - The Three Level Impacts of IS, to trigger their thinking about the potential impacts of IS at the industry, firm and strategy level.

- Documents such as the IS Annual Report are a way to publicize that IS understands the business and evidences accountability. Such a document should be developed which shows how IS can and does assist in meeting business objectives and acts (or can act)as a strategic tool. The statement should consist minimally of the IS mission, strategies, and issues of IS deemed to be of importance to effective business operations. See Example 1 - IS Annual Report.

- In order to learn the business, IS should either develop the business strengths of existing IS employees, tap into line units for business expertise or hire employees with technical, planning and business experience. The resources of consultants, books and seminars listed in Table XII can also be used. This is in addition to distributing IS

staff closer to line operations.

- IS will need to publicize or communicate guidelines to line management the first few times they are asked to address system planning in their planning efforts. These guidelines should be developed jointly with line management representatives, or at least, "signed off" by line or general management. They should be short and easy to complete. See Example 2 - IS Planning Guidelines.

- The results of line management planning efforts should be consolidated and common systems issues identified. If there are any plan redundancies, the involved parties must be made aware of their duplicate efforts, and negotiations promoted to reduce such efforts.

- The degree of formality, planning horizons to be covered, and documentation of results are dependent upon corporate culture and resources brought to bear (staff, money, consultants and other outside resources).

- The actual approach should consist of the following steps:

  - Pre-plan activities to develop a plan for planning and define the scope of the effort. The key participants of this step are the planning support team consisting of those who request, review and/or consolidate plan results.

  - During the Preparation Phase, the planning support team should perform activities to prepare themselves for their role in educating

user management. An "IS Potential" paper can be prepared and used by the support team to promote the idea of IS as a strategic tool. Discussions on the potential of IS should be held with line management prior to the beginning of their planning efforts.

- During the Identification of Issues, Goals, Objectives and Critical Success Factor Stage, these aspects which are providing the impetus behind plans must be defined. This must be done by each line manager either alone or in key manager brainstorming sessions. Results should be shared.

- An Assessment of the Current Situation in each line operation or suport function will be necessary to serve as the baseline for the planning effort.

- Descriptions of Opportunities and Needs from an assessment phase are necessary. IS management and or business planners may need to consolidate the results of this step and report back to line managers on any opportunities or needs held in common.

- The opportunities and requirements must then be evaluated and Priorities Set. The results should be communicated back to all line managers, and negotiation for change should be possible.

- In the Plan Formulation step, documentation should be prepared appropriate to the planning activity - strategic, capital, or operating/budget and appropriate to the need for formality or informality. The IS and business planners may need to consolidate

plans from the various operational units and identify redundant efforts and common issues to be addressed at a corporate level. The final result should be a document to which management at every level can be held accountable.

- There are several caveats which must be considered in developing an integrated planning approach:

  - Timing of efforts to achieve integrated planning are critical. If there are reorganizations or other distracting and draining events occurring, the time is not right.

  - A top management sponsor outside of MIS is probably needed. MIS usually does not have the clout by itself. The sponsor can be found in the division which has been satisfactorily served by IS and which has achieved some goal through IS (for example, significant cost reduction or revenue enhancement.)

  - Consider using a consultant, particularly to sell executive management on the idea of IS as a strategic tool. A consultant may offer the necessary objectivity and "seal of approval".

  - IS and business planners, should publish and communicate their results widely, both vertically and horizontally.

III. THE NEED AND THE IMPEDIMENTS

Ours is an age of uncertainty with an evolving economy and an uncertain future. But managers must still forge a path of action in a viable direction. The new environment will require highly efficient operations, marked by the integration and application of technology. We must continualy adapt and infuse the latest technologies, and build upon our technological infrastructure, providing information and information handling services where and when needed. These IS resources are, in fact, strategic tools in that they can assist companies in implementing strategies. And for some companies IS can even become a direct part of products and services. But how do we plan in a dynamic environment? The key is to use the capabilities of all functions within a company, including IS, and to promote communication between functions so that all are aware of the potentials of each other.

A. WHY PLAN IS AT ALL?

1. Background

- The primary objective of each function within an organization, including IS, is to contribute to the ability of the organization to make a profit. In order to do this, the IS manager must at a minimum create an operation that provides the NECESSARY services for the minimum cost consistent with being able to meet the evolving needs of the overall organization as they arise.

- Typically IS is considered to be a service operation to the organization, and planning has been isolated to the IS functions and has been generally in a short-range adaptive mode because of:

  - Rapid changes in hardware, software and communications technology

  - High rate of personnel turnover in IS resulting effectively in a scarcity of skilled personnel

  - Scarcity of financial and managerial resources

  - Constant changes in system requirements

  - Frequent and unexpected user demands due to such activities as new marketing programs, new product design, legal and regulatory changes, or competitive environment shifts.

- IS management must realize that they themselves are also the agents of change due to the information technology explosion, and should be in the best position to plan or contribute to how changes will take place. For example, in insurance companies, there is growing belief that expert systems will reduce the need for skilled, highly-paid underwriters. The implications are increases in technology investment and utilization, profound human resources changes and changes in the profit picture. Planning for these changes is mandatory.

- IS activities clearly represent an area of great strategic importance in

some companies. One respondent to our survey said that "IS is a competitive weapon." IS needs the guidance of corporate goals, but the achievement of these goals can be severely impacted by IS performance and capabilities or lack thereof. The use of IS in banking is a clear example of how IS activities are strategic in nature. Integrated planning in which general management of the corporation, line management of revenue operations, and management of service functions including IS participate is mandatory.

2. Issues

- The business planners and general management level respondents identified the issues listed in TABLE IV as those being addressed in their current planning efforts. Generally, there was more interest in cost control than in business expansion. Companies in a business expansion mode were more inclined to see IS as a competitive weapon. (It may be that IS can only be considered a strategic tool if a company is in expansion mode, and capital to enhance IS is available.)

- IS planners and general management level respondents identified the issues listed in TABLE V as those driving their current planning efforts. From the list of IS issues, it is clear that IS issues are predominantly TECHNOLOGICAL in nature.

- The only issues clearly held in common were productivity and cost control and integrating IS as a strategic tool although this latter was not of primarly importance. It would seem that issues held in common,

TABLE IV - ISSUES IDENTIFIED BY BUSINESS PLANNERS

	Total Responding Yes
Productivity and cost control	9
Managing and planning for growth	4
Market focus and development	4
Economic downturn	2
Integrating IS as a strategic tool	2

TABLE V - ISSUES IDENTIFIED BY IS PLANNERS

	Total Responding Yes
System architecture	16
Capacity planning	15
Micro Proliferation and issues	10
Manpower planning and development	7
Improving IS/management communication (integrating IS with business planning)	6
Cost control and productivity	5
Resource utilization improvement	4
System cost justification	3
Information/data resource management	2
User education	2
Security and disaster planning	2

would be a driving force for integrated IS and business planning.

- While IS management and planners would argue that their issues stem from business issues, it is interesting to note that they do not articulate the driving business issues, but rather the resultant technological issue. It would perhaps be advisable for IS personnel to show their understanding of their function within the organization by tying it directly to business issues.

B. WHAT ARE THE BENEFITS OF INTEGRATED IS AND BUSINESS PLANNING?

- Table VI lists benefits achieved in those companies with an integrated or linked plan.

- IS clearly supports business goals. Examples were given of better customer service with more current information, new lines of business developed, and users promoting their own productivity by using information technology as a tool. The overall needs and capabilities of the corporation were made more apparent through integrated planning efforts. The company was more able to take advantage of technology in terms of competitive positioning.

- There were reduced costs of both IS and business operations. Redundant system acquisition was avoided through planning and coordination. IS development efforts were better scoped with greater understanding of

requirements achieved by study by both IS and line personnel participants.

- At one company, IS was decentralized and work spread to smaller systems at less cost than if doing the work on corporate headquarter's centralized systems.

- 11 of the respondents stated that they had achieved a specific payback as a result of IS which was facilitated by integrated planning. (Note that most of the companies would not share their specific payback because they were concerned that it would divulge their strategies and they would lose competitive advantage.)

- In one case, the business plan stated an objective of becoming a more focussed manufacturer and the result was some divestitures and acquisition activity. IS was called in by general management to review an acquisition candidate. IS determined that existing manufacturing and financial systems at headquarters could accommodate the load of new products and plant control necessitated by the acquisition. Further headquarters was able to accommodate the administrative load and eliminate the administrative systems of the acquisition candidate. They determined there would be a savings of personnel and equipment as a result of this consolidation. The profit to the company made by the acquisition, with IS assistance, was $20 million.

- In another case, the company computerized the management of their timberland base. This led to smarter decisions about growing trees

and was largely responsible for over 30% improvement in timber yield over the last few years. This was attributed to using all of their strengths including those of IS.

- Another company said that their market share increased from 23% to 30% over the last three years because of the value added to their customers as a result of offering information services in addition to products and product distribution services. They were also able to lower operating costs as a result of IS. These benefits were achieved through joint IS and business planning.

- Yet another company attributed 9 years of continuing growth to IS and the open communications between all units including IS and general management

- Better resource utilization was identified as a benefit of integrated planning. More appropriate priorities for people, financial, plant and system resources were established. Specifically, there was better team work and a balance was reached between product/market development and people development as a result of information systems.

  - At one company, a reduction in staff, particularly middle level management, was achieved by developing information systems which allowed for the same level of control, as business grew. The information systems were achieved through system design of joint IS and line management personnel.

- Finally, an integrated IS and business plan aids management in meeting goals. A plan for people, financial, plant and system resources includes

TABLE VI - BENEFITS OF INTEGRATED PLANNING

	Total Responding Yes
IS clearly supports business goals/objectives	16
Reduced costs of operations	16
Payback	11
More effective resource prioritization/utilization	8
Plan used as an aid to insure accountability	7

TABLE VII - DEFINITIONS AND CHARACTERIZATION OF INTEGRATED PLANNING

	Total Responding Yes
Business and IS planning calendars are synchronized	9
IS is a strategic tool	8
IS participates actively in business planning and vice versa	7
Loop process	7
One plan	5

all the components for which management at the lowest level should be accountable. Planning keeps companies on track.

C. DEFINITION AND CHARACTERIZATION

- The definition of integrated IS and business planning is elusive. For many of the survey respondents it was easier to characterize in terms of process and products.

- Table VII lists the variety of definitions and characterizations given by respondents who had an integrated plan or process.

  - The business planning and IS planning calendars are synchronized. While this is required for integrated planning, more is still needed to achieve fully integrated planning.

  - IS becomes a strategic tool. IS provides for flexibility no matter what business direction is taken. IS provides tools to better service clients and inform management with significant cost advantages. IS actually becomes a product or directly contributes to a service and is ackowledged for its direct contribution. This is the best characterization of integrated planning.

  - IS personnel participate actively in business planning or vice versa. In this case, there are separate business and IS plans.

This is linked planning.

- Integrated planning is a "loop process". The system plan (which can either be physically a part of the business plan or a separate document) is conceived while developing the business plan. It is a "marrying process" whereby the business plans allocate resources to IS and the IS plan allocates resources to the business units. The IS plan actually fulfills the business plan tactically, but also partially directs the business plan in terms of future financial resource requirements.

- One plan is the result of integrated planning. This one plan is a business plan which includes IS as part of the operating budget. In all companies surveyed who said they had one plan, the business plan contains enough information so that an application development priority scheme can be established.

- Several respondents who said they had integrated their IS and business plan stated that the business plan was the BASIS for IS planning. It is the author's opinion that this is still reactive planning rather than proactive planning which is a primary characterization of integrated planning.

- Reduced costs, increased revenue, more effective resource use and management accountability appear to be the results of accepting IS as a contributor to the organization as evidenced by integrated or linked planning.

- Open communications between general management, line management and services management, including IS is common among those companies with integrated planning.

D. WHY DO COMPANIES NOT INTEGRATE AND WHAT ARE THE RESULTS?

1. Impediments to integrating planning

- Table VIII lists the reasons or impediments given by those respondents who did NOT have integrated planning.

  - Ineffective/inadequate communications was most frequently cited. This reason includes lack of downward communication from general management as to direction and lack of communications between IS and users and vice versa. The reason for this latter is that line management feels that IS does not understand the business, and of course, IS feels the user does not understand the potential of technology. It is quite clear, however, that the onus is on IS to understand the business requirements.

  - In 6 cases,even though there were extensive information resources, management did not feel that they were justified, or that no measurable return on investment had resulted from acquisitions. IS evidenced poor accountability.

  - Management was not willing to invest financial and staff resources

to an integrated planning process. (Note, this was the case of companies with serious economic problems.)

- Some companies were reorganizing and redeploying resources. One was recently acquired and had new management. One was experiencing an exceptionally high growth rate and much of the resources were being diverted to advertising and promotion. And two were in the process of distributing IS to the line operations. (Note - this last seems to be a precursor to achieving integrated IS and business planning).

- In several cases, general management or business planners do not understand the benefits of integrated planning (also means they do not understand the benefits of IS). In these cases, there will be no push from the business units to integrate planning and it will have to be initiated by IS.

2. Results of not integrating

- Those companies without integrated planning mentioned the following results of not integrating. See Table IX.

  - Both IS and general management respondents felt that not having integrated planning resulted in ineffective IS resource use and mediocre data processing support.

  - Increased costs of IS development from duplicate efforts (particularly with personal computer applications).

TABLE VIII - IMPEDIMENTS TO INTEGRATED PLANNING

	Total Responding Yes
Ineffective/inadequate communications	8
Can not justify costs of IS	6
Financial, time and staffing constraints	4
Company reorganizing and redeploying resources	4
Do not understand benefits of integrated planning	3

TABLE IX - RESULTS OF NOT INTEGRATING

	Total Responding Yes
Ineffective resource prioritization and utilization	6
Increased costs of IS development	3
Lost opportunities to use technology in operational areas	3
IS morale negatively affected	2
Is does not clearly support business goals	2

- IS management felt strongly that the company was not taking advantage of advanced technology in operational areas. (These managers were from companies with scarce financial resources.)

- IS morale was negatively affected. IS felt that their company was not keeping up with the competition. They felt they were being "jerked around" and forced to be reactive, not proactive. Several examples of acquisitions were given, where IS was told after the fact, and could not adequately or timely respond to the new volume.

- General management stated in two cases that IS seemed to just want to do their thing as opposed to supporting business goals.

IV. HOW TO INTEGRATE PLANNING EFFORTS

A. Convincing Top Management

- Top management blessing is required to initiate and support integrated planning. Their blessing is usually given when IS has proved itself to be a cost-effective contributor to the business. In order to show cost-effectiveness IS management has usually elevated their level of accountability. IS investments are rigorously cost-justified and there is formal or informal auditing with the results publicized. IS Annual Reports - (See V. B), monthly status reports, or management meetings with user and general management which also include IS are the modes used to publicize results. In many of the companies interviewed, IS had gone beyond just being cost-effective, to actually contributing to revenue by providing a service or a product.

  - An example was from one computer manufacturer, who had developed a manufacturing requirements planning (MRP) system which resulted in cost savings for them. They then, packaged the software with their computer and thus added a new product line of an integrated system.

Both cost effectiveness of service operations or revenue enhancement are strategic goals of every company. IS seen as a strategic tool is a goal of integrated planning, but it seemed from the companies interviewed, that IS had to become a strategic tool before integrated planning was approved.

- Table X lists the respondents answers to the question "How do you convince top management?"

  - The key to all of the following points, was that vertical and horizontal communications were effected. Many of the companies stated that there had been some cultural shift leading to a growing philosophy to remove barriers to communications at all levels and between all levels within the organization. Integrated planning efforts were achieved after communications, in the form of cross-fertilization between line units (the business operations) and IS was accomplished. IS would work with line units to learn the business, and through this process, also educate line unit management and personnel of the potentials of IS.

  - In almost half of the cases, there was no convincing necessary, but rather integrated planning resulted from a top-down decision. In several cases, top management or the board of directors hired a professional IS manager who in turn, hired or trained personnel to initiate and participate in integrated planning efforts. Also in these cases, management "salted" IS with business people and also charted a course to distribute IS functions into line operations.

  - Professional IS management is differentiated (perhaps unfairly) from IS management who have come up the ranks into the top IS position. Professional IS management was hired from outside and brought in for their ability to integrate separate IS technological domains and to accomplish decentralized IS. The person was able to communicate IS potential and successes constantly and articulately. He or she paid

TABLE X - CONVINCING TOP MANAGEMENT

	Total Responding Yes
Top-down decision from CEO, board of directors or parent company	10
Professional IS management	5
One good experience	4
One bad experience	3
High computer literacy of staff	2

much attention to selecting and improving IS human resources to enhance the IS understanding of the business. This IS manager reports to the president or to a very high level. In the companies that stated that professional IS management convinced top management, respondents said that the new IS manager insisted upon formal IS planning which initially was a separate IS plan which was predicated on business objectives, but once an IS plan was developed, integrated IS and business planning followed the next year.

- The most interesting responses were from those who said "one good or one bad experience". In some of the companies, IS was able to prove themselves despite top management backing. Perhaps some system implementation had had a profound cost savings or had significantly contributed to revenue. IS management in these cases was able to show how IS had contributed to meeting objectives. The bad experiences were ones where it was obvious that if IS had been a part of the action, the bad experience would not have happened. For example, management of one company had acquired a business whose systems were in such poor shape, that the expense to bring them up to the level of the rest of the operation, wiped out the hoped for benefit from the acquisition. It was these cases where business plans had not included IS, that showed after the fact, the need for integrated planning and communications.

- In two of the companies, the nature of the business (Research and Development) resulted in an extraordinary high level of staff computer literacy. Top management was forced to authorize changes

to result in an environment more supportive of staff efforts.

B. WHO SHOULD PARTICIPATE IN INTEGRATED PLANNING?

- A variety of players participate in integrated planning. Table XI shows the participants and their roles.

- IS management takes responsibility for educating users and management on the potential of information technology. Further, they would have studies performed on productivity and develop cost/benefit analysis to justify information technology applications seen to have potential value (specifically office automation which today means some aspect of end-user computing). Other studies were on system architecture and future technology trends and their potential implications.

  - In an insurance company, a planner and a consultant assessed alternative insurance product distribution modes such as direct writing as opposed to continuing use of the independent agent system. They considered organizational, political and technological implications of each mode.

  - In a public utility company, with no IS planner, the business planner was called upon to assess demographic trends and the role of IS in responding to these trends.

- General (executive) management is responsible for overall business direction and policy.

TABLE XI - Integrated Planning Participants and Roles

Participant	Overall Direction and Policy	Division and Line Plans	Evaluate, Recommend changes, Approve	IS Direction & Plan	Plan Implementation		Plan Consoli-dation	Studies, Educate on IS Role
					IS	Line		
General management	R		R					
Line management		R	C	C		R		
IS management		C	C	R	R	C	R	R
Business planner		C		C			R	C
IS planner		C		C				C
Consultants or task force		C		C				C

R = Responsible
C = Contribute

- Division and line management are responsible for their respective plans (strategic, long-range, tactical, operating, budget and other names specific to each company). Contributions to the planning process come from planners within the divisions and from IS and also from IS management and consultants.

- IS direction and plans are the responsibility of IS management with contributions primarily from IS planners and also business planners, and occassionally consultants or task forces. Consultants are often used because of their knowledge of future technology direction, or because of their planning and facilitative skills.

- Companies which were decentralized (IS and/or business operations) in all but one case, consolidate plans. This is the responsibility of business and/or IS planners. In several companies, who had integrated planning there is no longer a separate IS planning function.

- IS and line management is responsible for implementation of their respective plans or plan components.

C. WHAT ARE THE REQUIRED RESOURCES?

- The time spent and the number of participants varied so significantly, that no generalizations can be drawn. Most of the companies had both business planners and IS planners with full-time planning (or study) responsibilities. At the least, about one month of effort was spent by both IS and line management each year to come up with next year's

operational plan.

- Table XII shows the variety of consultants, books and seminars considered to be helpful in promoting integrated planning.

- Only a few systems-oriented seminars were mentioned, but many of the respondents said that they held in-house seminars led by IS and business planners or management which educated on IS or business-specific topics. They also mentioned that in-house management development seminars were held which promoted communication skills.

TABLE XII - RESOURCES

CONSULTANTS	Total Responding Yes
IBM - Business Systems Planning	4
SRI - Long-rangle planning and IS planning	4
Boston Consulting Group	2
Others	8
None	8

TABLE XII - RESOURCES

BOOKS

"Chief Executives define their own data needs", John Rockart, HARVARD BUSINESS REVIEW, 1979.

EXECUTIVE GUIDE TO SUCCESSFUL MRP II, Olliver Wight, 85 Allen Martin Drive, Essex Junction, Vt 05452 (Free) 1-800-343-0625.

MEGATRENDS, John Naisbitt,

BUSINESS SYSTEMS PLANNING: IS PLANNING GUIDE, IBM, GE20-0527-1.

JOURNAL OF CAPACITY MANAGEMENT, Institute for Software Engineering

CORPORATE INFORMATION SYSTEMS MANAGEMENT: THE ISSUES FACING SENIOR EXECUTIVES, Warren McFarlan and James L. McKenney; Richard D. Irwin, Inc.; Homewood, Illinois 60430, 1983.

EXECUTIVE INFORMATION PLAN, IBM.

IN SEARCH OF EXCELLENCE,

COMPETITIVE STRATEGY: TECHNIQUES FOR ANALYZING INDUSTRIES AND COMPETITORS, Michael Porter; The Free Press (Macmillan); 866 Third Avenue, N.Y., N.Y. 10022, 1980.

STRATEGIC PLANNING FOR MULTINATIONAL CORPORATIONS, Selig;

STRATEGIC PLANNING FOR MIS, E. McLean; John Wiley and Sons, N.Y.

SEMINARS

Business Systems Planning, IBM

Holland's IS Planning, Holland Systems Corp., Ann Arbor, Mic.

AGS ISP Methodology, AGS Management Systems, Inc., 320 Walnut St., Philadelphia, Pa. 19106.

D. CAN YOU USE IS PLANNING METHODOLOGIES?

- Since all the companies had developed IS plans, one can say that all had used some planning methodology. However, there was a variety of approaches ranging from traditional IS approaches to internally developed methodologies (IDMs).

- See Table XIII for the Methodologies Used.

- The methodologies varied in terms of structure and flexibility. Those who used combinations of methodologies tended to have the most ad hoc, adaptive and flexible approaches. Those using BSP, CSF, SRI-ISSPP, or the Nolan/Norton Approach tended to have a more structured process.

- Most of the companies used BSP, CSF, SRI, or Nolan/Norton to prepare their first significant IS plan, but almost all subsequently used an "internally developed methodology (IDM) for planning. It seems that the structure is necessary for the first planning process, but that more adaptive approaches are appropriate subsequently.

- The IDMs were occassionally named, such as "IS as a competitive weapon" or "Competition IS planning". These names reflect how IS is viewed at these organizations.

- All companies with an integrated or linked planning process no longer used BSP or CSF. However, the approaches of SRI and Nolan/Norton so far were proving to promote both on-going and integrated planning. Both of

TABLE XIII - METHODOLOGIES USED

	Total Responding Yes
Business Systems Planning	10
Internally Developed Methodology	9
Critical Success Factors	3
SRI - IS Strategic Planning Process	3
Nolan/Norton Approach	3
Combinations of the above	12

these can be characterized by their high degree of user and IS interaction and by their insistence of starting the process with an identification of business strategies and ending with feedback.

1. Business Systems Planning Methodology

- As mentioned before, BSP is appropriate on a one-time basis. It can be used to study an enterprise's business system to meet near- and long-term information requirements and make management recommendations.

- Briefly, BSP provides for an analysis of the environment at increasing levels of detail as follows:

  - Business objectives and problems
  - Business processes
  - Business organization
  - Information and computer applications
  - Data files
  - Data classes

- Further, BSP identifies IS objectives and defines required IS changes.

- BSP defines an information architecture, establishes architectural priorities, shows technologies and management practices requiring support and defines MIS changes required for architectural priorities. The results of these activities are used in establishing IS recommendations and action plan.

- The BSP output includes the following:

    1. Findings and conclusions.

        a. Major IS problem analysis.
        b. MIS problems deduced from IS and support problems.

    2. IS objectives.

    3. Definition of high-priority IS projects.

        a. First systems support requirements.
        b. Projects addressing major IS problems.
        c. Immediate actions recommended.

    4. Action plan for follow-on projects.

- The impact of having developed a plan using BSP is that priorities are established for management commitment and resources are allocated accordingly. The process itself gets management involved, since it begins with a definition of business objectives from them. The interview process can be a time when the IS planners educate the business management on the potential benefits of IS.

- The criticisms or deficiencies of BSP in terms of promoting integrated planning mentioned by respondents include:

- Not a "living" document - doesn't support on-going planning.
- Too much focus on data elements - goes from strategic issues to detail too quickly.
- Too forced and artificial.
- Breaks down if there are organizational changes during the planning process.

2. Critical Success Factors

- The CSF approach to IS planning consists of a study which starts with a widespread sample of managers who are queried about their total information needs. These are based on their critical success factors - those factors which for any business, are the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. Often an outside consultant is used, particularly for interviews at the executive level. Managers are pressed to quantify the critical factors so that they could be measured later. The results of the sample are compared with the existing information systems. An information structure can be developed from analysis of the various manager's responses. A consultant can help find trends in the critical success factors. Subsystems necessary to provide the information not available are identified and assigned priorities for development.

- The criticisms and deficiencies of CSF included:
  - Too academic.
  - More form than substance.

- Managers couldn't see purpose of exercise and how it related to developing a systems plan.

3. SRI - IS Strategic Planning Process

- See the attached figures (Figures 1 and 2). Note that the completed IS Strategic Plan (10.7) both is fed by and feeds into the corporate plan.

- The SRI process is structured, and also calls for heavy involvement of corporate and middle management. They assist in identifying critical business activities, reviewing the future logical model, in developing and approving the IS strategic plan, and in selecting promising new technologies.

- The process is one which emphasizes for corporate management the complexities of IS. However, experience to date with the SRI-ISSPP process by the three respondents using it, shows that management and systems management and personnel are working much more closely and synergistically, a key to integrated planning.

IS STRATEGIC PLANNING PROCESS

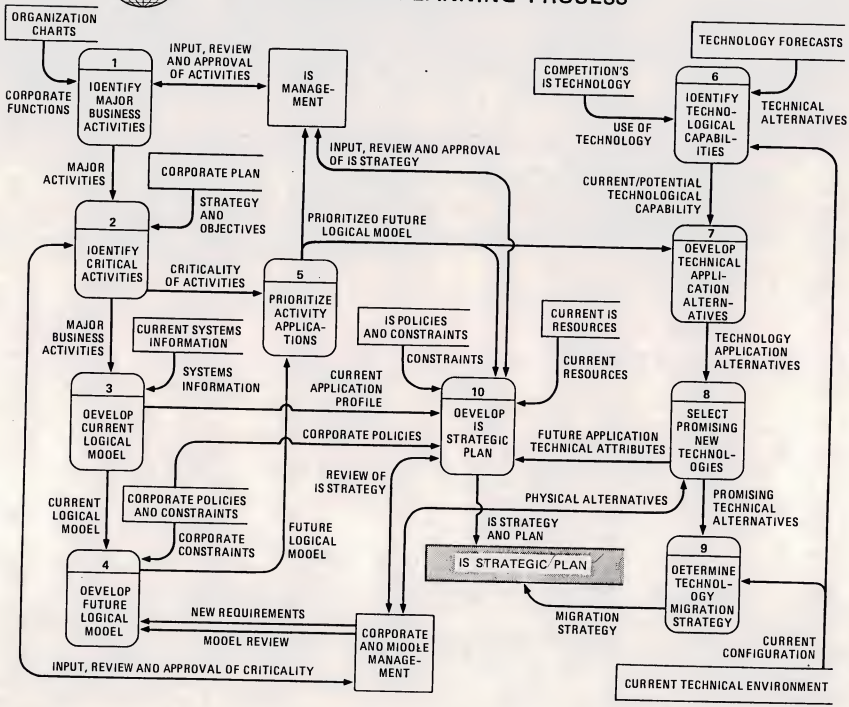


FIGURE 1

10. DEVELOP IS STRATEGIC PLAN

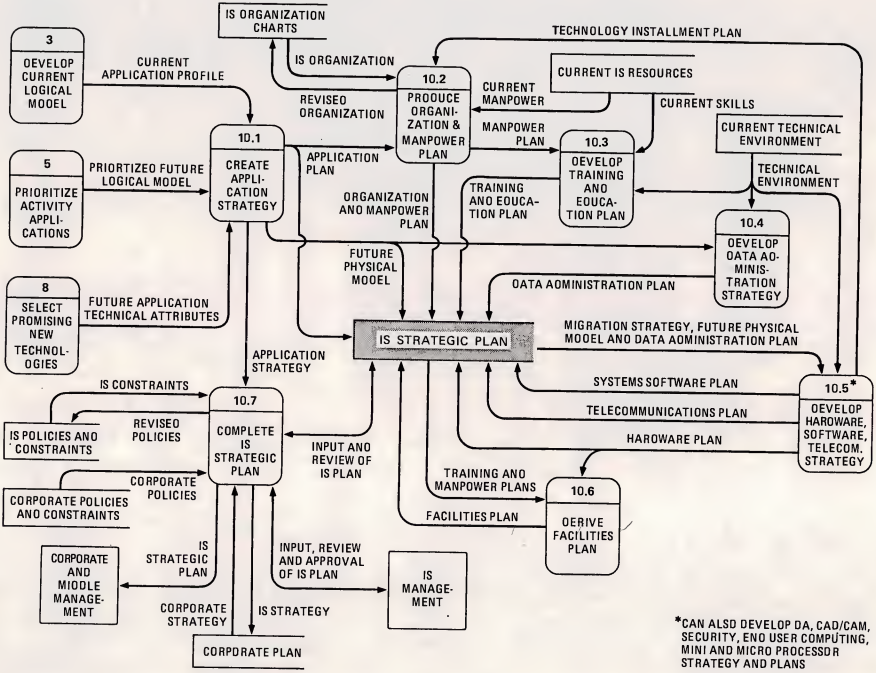


FIGURE 2

E. WHAT WORKS?

1. Keys to Success

- An integrated planning process has less to do with developing a planning approach than it does with developing accountability of IS, distributing IS activities closer to the divisions to be supported, and assisting management to see IS as a strategic tool.

  - Accountability: IS consistently meets budget and schedule commitments. IS provides services which are cost effective, and costs are rigorously controlled. Further, IS reports on their accountability to the end user, perhaps through the use of an IS Annual Report or in monthly status letters or meetings. This contributes to a better IS reputation. During the reporting, IS can educate end users on the potential of IS.

  - Distribution of IS: IS, perhaps along with Finance and Human Resource functions, is distributed to the divisions to be supported thereby embedding IS functions into the divisions. Closer communications between the IS functions and the business units is facilitated by this move. Conversely, IS staffs are "salted" with personnel with a clear understanding of the business. The result of this move is that business management better understands IS, and IS better understands the business.

  - IS is seen as a strategic tool: Management knows how to assess the

competitive impact of information technology. They see that information technology has an impact at the industry, firm and strategy levels. (See Table XV - The Three Level Impacts of IS).

TABLE XII - The Three-Level Impacts of IS

Industry Level Products and Services Markets Production Economics
Firm Level Buyers Suppliers Substitution New Entrants Rivalry
Strategy Level Low-cost Leadership Product Differentiation Concentration on Market or Product

--Industry Level - To link IS to the strategic needs of the organization, management must anticipate the impacts at the industry level before they occur so that strategies can be developed to position the organization in the new industry setting. For example, if teleconferencing is used as a substitute for travel, there will be a significant impact on the transportation industry's business travel market. Management must look at the impact of information technology over the next five to ten years on:

---Products and services - for example, IS may alter the product life cycle and increase the speed of distribution.

---Markets - for example, the financial industry through creating new delivery systems such as ATMs and home banking services, contributes to an increase in their consumer and business customer's computer literacy. The result will be an increase in the demand for electronically-based products and services.

---Production economics - through the monitoring, controlling, and coordinating potential of IS, the economies of scale in terms of machinery, space, energy and labor utilization can be significantly changed.

--Firm Level - IS changes an industry structure through affecting the competitive forces. Michael Porter in COMPETITIVE STRATEGY:

TECHNIQUES FOR ANALYZING INDUSTRIES AND COMPETITORS, has developed a framework of competitive forces which can be used to identify opportunities for IS deployment. The framework includes the following competitive forces:

---Buying power - for example, IS becomes a strategic weapon when buyer information systems can determine the profit potential of various buyer groups.

---Supplier power - IS can mitigate the factors creating the power of suppliers. For example, robotics or expert systems can reduce the cost of labor, and reduce labor's power which cuts into a firm's profits.

---Substitution - product substitution economies are both a threat and an opportunity. Having to combat substitutes is costly, but offering a substitute can increase profit. IS can be deployed for both situations. For example, the ability to offer consolidated financial services, facilitated by IS, provides a substitute for discrete financial services.

---New entrants - IS can deal with the impact of new entrants, both offensively and defensively. For example, extensive information services offerred to independent insurance agents by the first insurance company to develop an extensive telecommunications network giving access to on-line services, serves to lock the agent to that company.

Other insurance companies attempting to offer more information services are essentially blocked from entry.

---Rivalry - IS can assist a company to identify when to compete, when to cooperate, and even how to do so effectively. The "how" is most effected by the use of IS distribution channels. For example, small wholesalers can effectively rival the larger wholesalers by availing themselves of the Uniform Communication Stanards (UCS) which provides for standardized data and communication networks. Or smaller banks may share a common group of ATMs against a large market share leader.

--Strategy Level - Companies position themselves relative to their industry by effectively implementing one or more generic strategies and IS can impact the ability of the orgnization to execute the strategies. Information technology affects a firm's strategy in terms of affecting:

---Low-cost leadership - IS can be used to improve the productivity of labor (reducing labor and substituting lower cost IS), or improving the use of other resources (such as equipment and inventory).

---Product differentiation - IS can contribute to the quality of a product or service or to add unique features to the product or service.

---Concentration on market or product niche - For example, IS can be used to locate market/product niches and to assess profitability within each through the use of data base and modeling tools.

(From "Information Technology: A New Competititive Weapon", Gregory L. Parsons, Harvard University, SLOAN MANAGEMENT REVIEW, Fall 1983.)

- There are three other keys to success to implementing an integrated planning approach. These are 1) an insistence on open communications, 2) a top management supporter, and 3) synchronizing IS and business planning calendars.

  - Open communications: Both vertical and horizontal communication channels are open. Top management and successive layers communicate on business direction, and conversely listen to lower levels about the impact of business direction on operations and how they can contribute. Further, communications across functions are promoted, such as IS to the business unit and vice versa. Joint study teams are the norm for issue development and for planning.

  - Top management supporter: There is a sponsor to sell the approach and to carry it out. IS management usually does not have the clout by itself, so a sponsor from the business is needed who can sell the approach to the executive group. The sponsor can be found in the business unit who has had a positive experience with IS - he or she understand the benefits of IS and of integrated planning.

- Planning calendars are synchronized: IS performs their plan and budget preparation at the same time that the business units are preparing theirs. This is not enough, by itself, but is mandatory for integrated planning.

2. Planning Process

- Process Variables

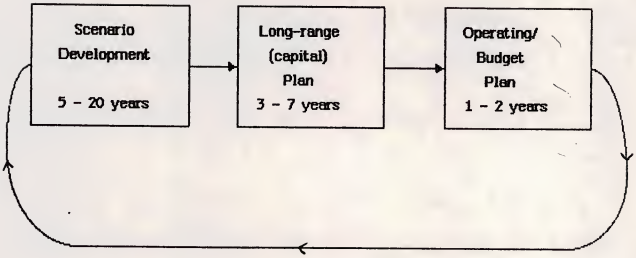
- Each company interviewed which said that they had an integrated or linked planning process had a different approach which varied in terms of formality, planning horizon, and documentation of results.

  - The formality of the process varied from a structured process with each business manager developing a "strawman" plan which was reviewed, refined, and finally accepted; to one where most planning occurred in a 2-3 day brainstorm of key managers, with one person documenting the results.

  - Figure 3 shows the various horizons for planning efforts. The longer planning horizons were addressed by the energy and public utility firms through the development of scenarios and covered a period 5 - 20 years out. The long-range plans were usually for 5 years, but several firms had 3 year plans and a few had 7 year plans. The long-range plan was occassionally called a capital plan. The operating/budget plan had a horizon of one or two years.

  - The documentation of results are addressed in the section titled "Results of the integrated planning effort".

FIGURE 3 - PLANNING HORIZONS



- Process Steps

- Whether the planning effort was for the development of a scenario, a long-range plan, or an operating/budget plan, the following steps were performed. See Figure 4.

  1. Pre-plan Activities consisted of developing a plan for planning and communicating to key participants about the scope of the effort, specific objectives, resources, and any administration mechanics. These latter often had to do with review and plan consolidation efforts. The IS and business planners and their respective management were most involved at this step.

  2. The Preparation Phase consisted of activities to prepare the planning support team for understanding their role in educating user management. For example, in those companies where IS was not yet viewed as a strategic tool, the IS and business planning staff had a responsibility to educate line management on the potential of IS. Occassionally, an "IS Potential" statement would be prepared and distributed throughout the organization. This statement was most often prepared by IS and detailed the potential of IS on each of the business units. It might take the form of a scenario. At one company, it consisted of a white paper discussing the following:

     -Economic/environmental forces affecting the future

- External forces

  -- Political/economic/demographic

  -- Specific to the industry

- Internal forces

  -- Company business scenario (strategies, objectives, goals)

  -- Technical scenario of IS resources within the company

  -- Manpower scenario showing IS requirements and impacts

- Demand for IS

- Technology scenario - expectations of future developments and their potential impact on the strategies, objectives, and goals of the business.

3. Identification of Issues, Goals, Objectives and Critical Success Factor Stage consisted of gaining an understanding of the goals, objectives, and issues which are providing the impetus behind plans. Also at this stage, the factors which management views as critical to achieving goals and objectives are identified. This stage was done by each line manager in some cases working separately, and in others, was done in key manager brainstorming sessions. In companies, where IS was viewed as a strategic tool, the results of this stage were communicated throughout the organization.

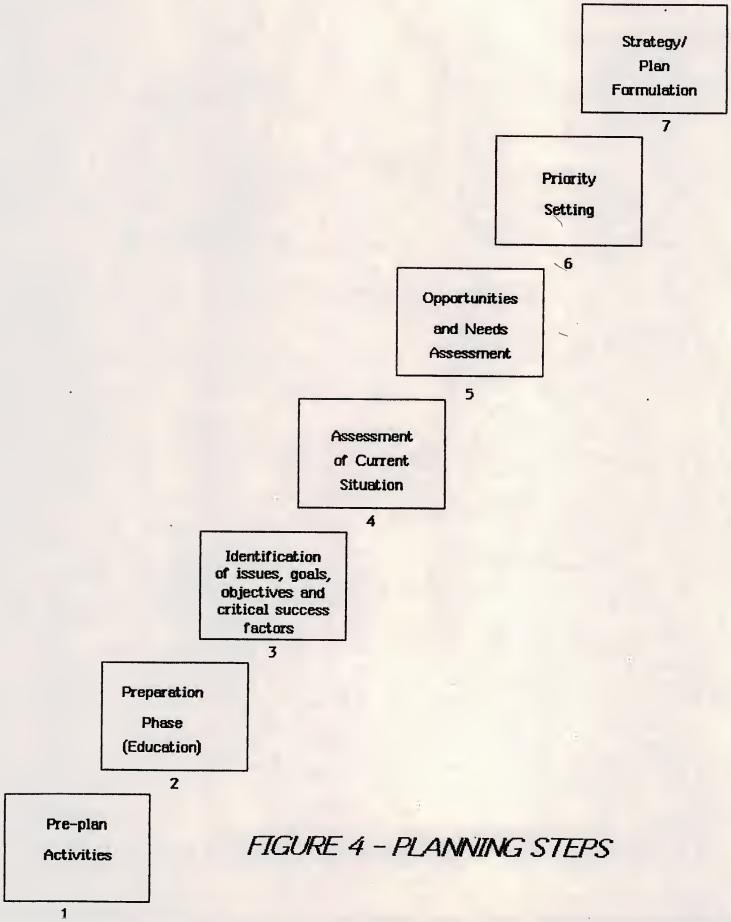


FIGURE 4 - PLANNING STEPS

4. Assessment of Current Situation step consisted of determining the status of the business in terms of strengths and weaknesses, capabilities and constraints to provide products or services. This step was performed by each function within the organization and essentially provided the baseline for the subsequent plan. Again, the step could be performed individually or in group sessions and the results communicated broadly or narrowly.

5. In the Opportunities and Needs Assessment phase, descriptions of business opportunities and requirements which IS can address were developed. These were based on objectives identified in the issue/goal/objectives stage - Step 3. IS and/or the business planner was often called upon to consolidate the results of this step and to report back to line managers on any opportunities or needs held in common.

6. In the Priority Setting activity, the opportunities and requirements were evaluated and priority classes established based on the goals and objective ranking previously identified - Step 3. Again, the results were communicated and in most cases, line managers and executive management negotiated for changes in priorities.

7. In the Plan Formulation step, documentation was prepared appropriate to the planning activity. If a strategy was being developed, alternatives for pursuing opportunities and addressing requirements defined in terms of constraints were documented. If a plan was being developed, opportunities and requirements priorities were

documented with the steps to address. Consolidation and reporting was accomplished at this step also.

- The companies with an integrated or linked planning process accomplished the above in an environment of open communication between levels (vertically) and between functional units (horizontally).

  - At one large energy company, system and business planning had reached a high level of sophistication through the use of capacity planning techniques. Capacity management provides a structure for data gathering for the user and a defines a high-level system impact based on the results of business planning. The steps for planning at this company were as follows:

    --The user team develops software specifications (IMS screen layouts) to satisfy business operation needs.

    --The software development vendor (in-house IS group) turns these into IMS transactions.

    --The user gets input from the vendor as to CPU and I/O requirements and feeds these into a capacity planning model (developed using Multiplan).

    --The user can then turn information about business transaction volume into system requirements (eg. CPU required to maintain a given flow rate of transactions required to run the business). Users can project system requirements based on business plans

(eg. to contract or expand business volume) which feeds into their business plan as a line item of system resources required.

--The IS group consolidates estimates from each user area and develops a separate IS plan to meet the requirements of all users.

- The process was also part of an on-going looping process, as shown in the following examples:

--At one large services company, the respondent stated that "Strategic planning is on-going. Each year starts with identifying or reiterating critical success factors. Corporate IS works with distributed IS who works with line managers to educate that IS can affect the competitive posture. Line managers develop plans, identifying IS activites which stimulate the business. The results of the planning and development efforts are reported back to all other line managers. Implementation activities are reported on an on-going basis throughout the year, and feed into the start of the next year's planning effort."

--At a large bank, the respondent stated that "integrated planning is a looping process with a high degree of interaction between line and IS management. We begin with line management developing 5 year plans. At the same time, IS is preparing their plan, trying to anticipate line group directions. They are able to do this because the line management sits in on planning sessions. Conversely IS assists the line managers in their business planning. IS presents

their plan to line management and discussions ensue. All management then refines their plans. All managers meet in an executive level planning session for one day and hash out problems, develop priorities and finally do next year's financials. They then each go back and do a one year plan, which includes sections on human resources, financial resources, facilities and systems. IS publishes a consolidated plan. By then, the next year's process must be started."

--At a distribution services organization where IS is a line item in the plan, the operating units start their long-range planning efforts in August and complete their operating budget by the end of April. These are submitted in November, consolidated by the end of December and presented to executive management. During January, corporate management provides feedback to the operating units and a series of negotiations occur until final recommendations are made by the end of January. In February, the operating units put together a detail budget for the following year. The budgets are approved by the end of April. Planning for the next year, begins in August.

V. DOCUMENTATION OF INTEGRATED PLANNING

A. The Plan

- Of the 24 companies with integrated or linked plans, 10 had a single plan. This single plan was a strategic or long-range plan. Another 7 had a separate IS plan in addition to the business plan. (See Table ~~XIV~~ XV - Documentation of Results.) The remainder were at the point of preparing their first integrated plan and had developed guidelines only (see the next section).

- Those with a single integrated plan, still had application development priority lists and project plans (eg. for implementation of a network or enterprise-wide data base) but these were not full-blown IS plans (ala BSP).

- Those with separate plans felt quite adamantly that a separate IS plan was mandatory, just like each division or business unit should have a plan. The documents were intended to serve as tools for monitoring progress.

- As mentioned in the section on definition/characteristics of integrated planning, the documented results do not determine whether a company has integrated planning, it is rather the process.

1. One Single Plan

TABLE ~~XIV~~ XV - DOCUMENTATION OF RESULTS

	Total Responding Yes
One single plan	10
Separate IS and business plans	7
Guidelines for integrated plan	7

- Those with a single plan treated IS just like financial resources, human resources and facilities. In other words, the plans for each of these resources was treated with equal importance in terms of meeting the business goals and objectives.

  - One company had a strategic plan, an "executive plan" (long-range) and an operating (budget) plan.

    --The strategic plan covered the next 20 years. It consisted of how revenue was to be generated during the 20 years (given two scenarios for consumers); research and development needed to assist; data processing and communications, human resources, and financial resources required.

    --The executive plan which covered three years included by function, an assessment of the more immediate external and internal environment and the objectives to address opportunities stemming from these environments. It then covered achievements such as progress in Equal Employment Opportunity and in enhancing productivity and management effectiveness. This last section covered the achievements of IS. It then covered the plans for addressing the opportunities identified for the next three years.

    --Finally, the operational plan consisted of the budget and plans, by function for the next year.

  - While there was one plan at each of the above levels, it should be

noted that the last two were by function and so essentially, IS had their own plan. However, given that IS was treated equally important as financial and human resources, the result was an integrated plan for the enterprise. IS is a critical, strategic part of this company.

- This is the goal of an integrated planning process - to have the company's critical resources of capital, labor, facilities and equipment (the arena of IS is included here) treated with equal importance.

2. A Separate IS Plan

- It appears that a separate IS plan can be in existence (in fact, to many it was mandatory) and the company can still practice integrated planning.

For example, one company's IS plan contained the following topics. Their plan, is in fact, the consolidation of the various division's planning efforts. It should be noted that the engineering and R & D laboratory division's have a high level of computer literacy.

COMPANY ABC IS STRATEGIC PLAN

1.0 Planning Assumptions and Model
(See Figure 5)

2.0 Enterprise and Division Needs

(With a reference to a detailed list of the strategic directions of each division which had been prepared with the help of each division manager. Each division had listed their needs and strategies and critical issues to which IS could be applied.)

Program (Function) Support
Productivity
Capital and Funding
Control

3.0 Cornerstones of IS Strategies

Diverse Technologies
Resource Integration
Incremental Growth

4.0 IS Strategies and Direction

Networking
Shared Computing Facilities
Distributed Computing
Professional workstations
Management Information
Funding and Financing

5. Status of IS Systems Thrusts and Plans

The Network
Shared Computing
Automated Support of Regional Offices
Automated Support of Research Laboratories
Automated Support of Engineering
Automated Support of Manufacturing
Automated Support of Administrative Services
Workstations
MIS Enhancements

6.0 Summary

1. PLANNING ASSUMPTIONS AND MODEL

The basic planning assumption is that the Enterprise and Division needs and goals will determine ABC's IS support strategies and plans. This planning is for internal ABC systems support and does not include systems efforts undertaken for clients. (This was left up to the appropriate division. ABC's IS provided network, shared computing and other shared IS support only).

Appropriate application of systems technology to ABC needs dictate the cornerstones upon which the ABC systems strategies are based.

Individual systems plans and thrusts throughout ABC implement the systems strategies. These implementation plans and systems strategies taken together consitutute ABC's IS strategic plan. IS and Administration is responsible for establishing these ABC systems strategies and for leading some of these individual thrusts.

The four-level model below shows how the "top-down" needs and "bottom-up" thrusts relate to the ABC IS strategies and cornerstones.

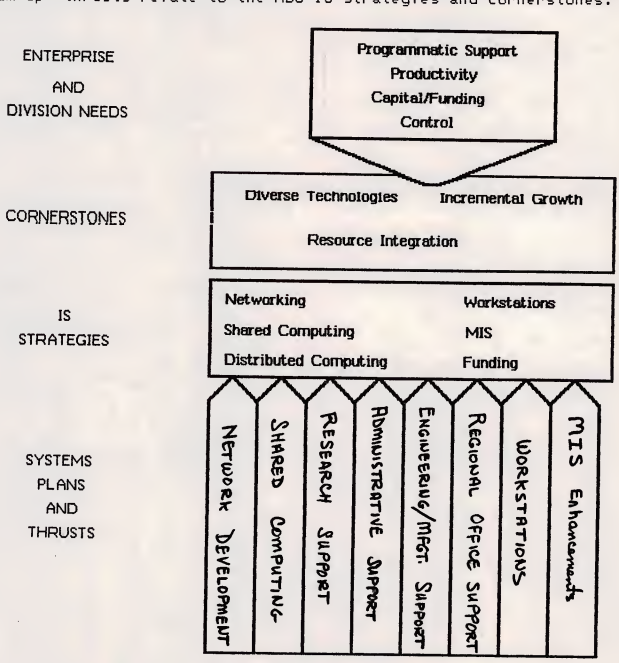


FIGURE 5 - PLANNING ASSUMPTIONS

B. IS ANNUAL REPORT

- A tool used by several companies for communicating how IS can and does assist in meeting business objectives and acts as a strategic tool, is the IS Annual Report. Shortly after issuing this report, these companies achieved an integrated planning process.

- The IS Annual Report is a statement minimally consisting of the IS mission, strategies, and issues of IS deemed to be of importance to effective business operations.

- It conveys how the IS organization sees itself as a resource providing support to the operating businesses and corporate departments, with a role to both identify opportunities for improving business performance (use IS to develop a competitive edge) and to respond positively to the information needs of the user communities.

- It further conveys that IS understands the external environment and the effects of the economy, consumer issues and industry specific issues; the internal environment - specifically the company's objectives and strategies and the ability of IS to support these; and technology directions and implications.

- It may discuss systems architecture and/or data base trends and strategies which reflect major projects or development efforts, particularly as they clearly support the strategic business objectives.

- It may discuss the changing roles of an IS organization and users (internal or external) given technology changes and changes in computer literacy of employees and clients.

- It may discuss the IS organization and functions and how these support the business and changing roles.

- Some companies also include last year's projects and significant achievements and how IS performed against budget.

- An example of the contents of one IS Annual Report of a manufacturing company include:

EXAMPLE 1 - IS Annual Report

- Mission Statement: To be a major force in enhancing XXX's competitive posture and capability for growth by providing effective systems and relevant information to support management decision-making, and by efficiently developing, operating and maintaining systems and procedures with high business leverage.

- Assessment Criteria for IS Resource Allocation:

  Fit with XXX's strategic thrusts

  Rigorous benefit-to-cost analysis

  Strong client endorsement and user support

  Acceptable risk profile

  Affordability and manageability

- IS Strategies:

  Seek on-going productivity improvements

  Support the user-computer interface

  Emphasize highly profitable new systems development

  Strengthen our role as consultants

  Maintain a high level of client and user involvement

  Create and maintain a balanced applications portfolio based upon business priorities

  Implement common systems where appropriate

  Sustain a technically current environment

  Manage and guide computer and communications facilities

  Pursue excellence in people.

- How IS supports XXX's business strategies: (The examples on the following pages are taken from 6 specific business strategies which are part of two generic strategies: 1) Build the business, and 2) Do it productively).

XXX's Business Strategies	IS Strategies	IS Key Programs
1) Build the business		
Maintain meaningful customer/franchise sevices.	Assume a PROACTIVE role with Sales to better understand and anticipate trends in the trade.	Support Sales in understanding the trade's use of point-of sale data in managing inventories and shelf space. Develop improved data accessibility and analytical capabilities in support of customer analysis activities, including comparative buying, merchandising and profitability measures. Expand the capabilities of exisitng volume tracking and retail intelligence.

2) Build the business productively

Improve professional productivity, and reduce administrative costs.	Identify and support opportunities to reduce administrative costs and improve professional productivity through computer-based systems, office automation and streamlined procedures.	In key leverage areas support studies and assist clients in implementing adminstrative work simplification, activity elimination, and the technologies of office automation.
	Increase IS efficiency in providing services/support across the corporation while maintaining sufficient flexibility to meet changes in XXX's environment.	Promote the use of computer-based analytical tools to improve business analysis capabilities and productivity.
	Provide leadership in ensuring that XXX's information structure can accommodate alternative organization structures.	Initiate a program for improved software-development productivity through the use of higher-level languages and prototypes. Where appropriate, make the tools available to users.
		Establish a process for change management in user communities significantly affected by IS activities.

C. IS GUIDELINES FOR LINE MANAGERS

- As mentioned previously, several companies had developed guidelines for line managers to consider as they developed their business plans. These guidelines were intended to assist the line managers in developing their specific systems plan which was to be part of the operating planning process. Further, the exercise was intended to stimulate the consideration of systems as a strategic tool, such that the strategic planning process would have the benefit of this thinking.

- These guidelines were usually developed under the supervision of a headquarters IS group, but in the cases where systems was also distributed, contributions had been made from the distributed systems groups. In these latter cases, the division manager supported by these distributed systems groups had contributed to the review of these guidelines, and had "signed off" on them.

  - At one large services corporation, the Computer Applications Committee, comprised of representatives from headquarters systems, distributed information systems, and user management had jointly developed guidelines. These guidelines had been signed off by division user management and by headquarters systems management. (The status of their usage was that line managers had completed their first operating plan which included the systems plan, and the headquarters systems group was consolidating the results of the systems plan in order to identify common systems issues, and determine if any redundant activities were planned. The

headquarters systems group was going to distribute a document covering issues, as well as connect the line managers planning redundant activities with the distributed information systems groups who had been involved in the existing systems activities.

- The following guidelines were part of the operating plan instructions:

EXAMPLE 2 - IS PLANNING GUIDELINES

SYSTEMS PLAN REQUIREMENT OUTLINE

1. Briefly discuss your systems environment. (Those aspects of the overall environment affecting or being affected by systems.)

   Outline your Systems Plan. (Plan objectives, scope, and a summary of the various parts of the systems plan including major projects and other actions).

   Identify the major considerations affecting your Systems Plan.

   - Operating company strategies, objectives and guidelines
   - Client requirements
   - Business/applications requirements
   - Hardware and software needs
   - Personnel needs
   - Funding and cost recovery considerations

   Explain how your Systems Plan supports your business strategy and business plan. (Describe the specific business conditions, objectives, strategy and other issues that the plan supports.)

   Discuss the compatibility of your Systems Plan with the IS strategies (which had been jointly developed by the distributed IS and line management representatives. The IS strategy had consisted of sections covering aspects of computing which had been distributed to the IS groups and included information processing, microcomputer, project-based computer support, and office systems. The communications strategy had not yet been distributed to the IS groups as an enterprise-wide network was under development.)

2. Highlight progress during the past year.
   Review any changes in emphasis or priorities.
   Identify problems which arose.

3. Discuss the major systems issues in priority sequence which will be addressed during the plan period.

4. Discuss any related areas of concern.

   Identify issues which need senior management guidance or involvement.

   Identify problems which may be common to other organizations.

(NOTE: This was a one page guideline. The material in parenthesis is added as explanation and did not appear in the guideline.)

- Other companies had guidelines, but covered other instructions:

  - One company used the planning process to obtain IS inventory information from line management. They distributed guidelines, prefaced with policy directives concerning the decentralization of IS. They also requested each manager to provide the following:

    -- An inventory of IS resources (data processing, office automation and telecommunications systems, etc.) and how each supported the business unit.

    -- An inventory of workstations per worker and services accessed.

    -- An inventory of how much information is machine readable and how much was projected to become machine readable in the coming year.

  - The next question was going to be asked in subsequent years:

    How will information resources be used as a competitive tool and what is the cost justification for such usage?

VI. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

- Integrated planning is an indicator that a company's management has accepted the critical nature of the IS resources. This acceptance of IS as a strategic tool is the primary characterization of integrated planning. At this point IS gains equal footing with financial, human, and facilities resources.

- The preconditions for integrated planning are:

  - Accountability - IS consistently meets budget and schedule commitments. IS reports on its accountability in status meetings, or formally through a document such as the IS Annual Report.

  - Distribution of IS - IS, perhaps along with finance and human resource functions, is distributed to the divisions to be supported thereby embedding IS functions into the line operations. This allows IS to better serve end users and promotes better understanding of the potential of IS.

  - IS is seen as a strategic tool - Management knows how to assess the competitive impact of information technology. They see that information technology has an impact at the industry, firm and strategy levels.

- Open communications - Both vertical and horizontal communication channels are open. Top management and successive layers communicate on business directions, and communications across functions are easy (IS to end users and vice versa).

- Top management supporter - There is a sponsor to sell the integrated planning approach and to carry it out. The sponsor can be found in the business unit who has had a positive experience with IS.

- Planning calendars are synchronized - IS and business unit management prepare their plans at the same time and each feeds to the other.

- The companies in the INPUT survey appeared to go through a series of phases prior to achieving an integrated planning process:

  - No IS plan

  - IS plans using BSP or some other methodology which begins by stating business objectives, and captures the requirements of business management. IS is reactive, but responsive to business requirements.

  - IS achieves accountability - consistently meeting budget and schedule, and begins to publicize or in some way communicate both their accomplishments and their further potential of being a strategic tool.

- IS is distributed closer to user management. This act further serves to cross educate both IS and user organizations about each other's capabilities and needs.

- Corporate IS issues guidelines to distributed IS management for working with user management to prepare IS plans for the distributed IS activities. Corporate IS consolidates the results and identifies redundancies, if any, and addresses common issues.

- Corporate IS and distributed IS issue guidelines or communicates with business management on how to prepare the IS portion of their business plan. The resultant business plan includes a discrete system plan section for each line manager. Corporate IS and/or business planners consolidate the results and identifies redundancies and common issues.

- The business plan reflects systems along with capital, human resources and facilities - each resource is considered to have equal strategic importance. A separate IS plan may still exist to serve as a document against which to monitor.

- The benefits of integrated planning are that IS clearly supports business goals and objectives; there are reduced costs of operations; actual payback can be achieved from IS; there is more effective resource prioritization and utilization; and the plan can be used as an aid to insure accountability.

B. RECOMMENDATIONS

- The onus is on IS to show a better understanding of their function within the organization. They can begin by understanding the issues of the business, and defining their own issues in business terms, rather than technological terms. Issues held in common are much easier to address jointly through integrated planning.

- It is also up to IS to show how IS can be a strategic tool. IS can begin by looking at past business decisions which might have had a more profitable outcome if IS had been involved in the planning. In order to convey the strategic nature of IS, IS must play a consultative role. IS management is in the best position to tout IS strategic nature in management meetings. IS management and planners can use the framework in Section V. E - WHAT WORKS - Keys to Success, to trigger their thinking about the potential impacts of IS at the industry, firm and strategy level.

- Documents such as the IS Annual Report are a way to publicize that IS understands the business and evidences accountability. Such a document should be developed which shows how IS can and does assist in meeting business objectives and acts (or can act)as a strategic tool. The statement should consist minimally of the IS mission, strategies, and issues of IS deemed to be of importance to effective business operations. See Example 1 - IS Annual Report.

- In order to learn the business, IS should either develop the business strengths of existing IS employees, tap into line units for business expertise or hire employees with technical, planning and business experience. The resources of consultants, books and seminars listed in Table XII can also be used. This is in addition to distributing IS staff closer to line operations.

- IS will need to publicize or communicate guidelines to line management the first few times they are asked to address system planning in their planning efforts. These guidelines should be developed jointly with line management representatives, or at least, "signed off" by line or general management. They should be short and easy to complete. See Example 2 - IS Planning Guidelines.

- The results of line management planning efforts should be consolidated and common systems issues identified. If there are any plan redundancies, the involved parties must be made aware of their duplicate efforts, and negotiations promoted to reduce such efforts.

- The degree of formality, planning horizons to be covered, and documentation of results are dependent upon corporate culture and resources brought to bear (staff, money, consultants and other outside resources).

- The actual approach should consist of the following steps:

  - Pre-plan activities to develop a plan for planning and define the

scope of the effort. The key participants of this step are the planning support team consisting of those who request, review and/or consolidate plan results.

- During the Preparation Phase, the planning support team should perform activities to prepare themselves for their role in educating user management. An "IS Potential" paper can be prepared and used by the support team to promote the idea of IS as a strategic tool. Discussions on the potential of IS should be held with line management prior to the beginning of their planning efforts.

- During the Identification of Issues, Goals, Objectives and Critical Success Factor Stage, these aspects which are providing the impetus behind plans must be defined. This must be done by each line manager either alone or in key manager brainstorming sessions. Results should be shared.

- An Assessment of the Current Situation in each line operation or suport function will be necessary to serve as the baseline for the planning effort.

- Descriptions of Opportunities and Needs from an assessment phase are necessary. IS management and or business planners may need to consolidate the results of this step and report back to line managers on any opportunities or needs held in common.

- The opportunities and requirements must then be evaluated and Priorities Set. The results should be communicated back to all line

managers, and negotiation for change should be possible.

- In the Plan Formulation step, documentation should be prepared appropriate to the planning activity - strategic, capital, or operating/budget and appropriate to the need for formality or informality. The result should be a document to which management at every level can be held accountable.

C. CAVEATS

- Timing of efforts to achieve integrated planning are critical. If there are reorganizations or other distracting and draining events occurring, the time is not right.

- A top management sponsor outside of MIS is probably needed. MIS usually does not have the clout by itself. The sponsor can be found in the division which has been satisfactorily served by IS and which has achieved some goal through I (for example, significant cost reduction or revenue enhancement.)

- Consider using a consultant, particularly to sell executive management on the idea of IS as a strategic tool. A consultant may offer the necessary objectivity and "seal of approval".

- IS and business planners, should publish and communicate their results widely, both vertically and horizontally.

PROJECT SPECIFICATION STATEMENT

A. Project Code: UCPL B. Program ISP

C. Project Title INTEGRATING SYSTEMS & CORPORATE PLANNING

D. Objective: To assist systems & planning management to integrate IS & Corporate plans in order to achieve benefits

- identify how – methodologies
- describe why - benefits
- recommend plan contents & integration approaches
- recommend actions to integrate

E. Audience (order of priority)

	User/ Vendor	Job Function	Type Company	Company Characteristics
1	User	IS management	Cross-industry	Over 1,000 employees
2	User	IS planning management	"	"
3	User	Corporate planning management	"	"
4				
5				

F. Reasons for Choosing the Subject.

1. Client requests
2.
3.
4.

INPUT

G. Scope of Study

1. Includes: • Generic systems planning
• Planning from corporate (centralized) IS perspective
• Planning methodologies critique
• Outline of plan contents or other documents for integration

2. Excludes: • In depth discussion of industry directions
• In depth discussion of business planning
• IRM (Information Resource Management)

H. Uses of Report: • Show reasons for integrated planning in order to assist IS mgt. to raise level of importance of IS function
• Define guidelines for integrated planning

I. Issues (How can IS be a complement to the business plans)

How 1. How to integrate IS and corporate planning? (how to communicate, how (or if) to link with budget)

Why 2. What are the benefits of integration of IS & CP? What is integrated planning? (Definition) (Corpate Planning)

What resources 3. What are the resources needed to perform integrated planning & how do you get top mgt. approval? (benefits of int.)

4. Should integrated planning requirements be rigid (structured & formal) or flexible? (See GM) intermin

Who 5. Who should be involved in integrated planning?

What results 6. What are the formal planning documents?

7. What strategic questions should an integrated plan answer? (See Transamerica)

8. What are the joint issues of IS & CP?

9. What are the impediments to integrated planning?

INPUT

J. Market Forecast ☒ No ☐ Yes _____ Period

K. Delivery Modes Covered NA

- ☐ Remote Computing (RCS)
- ☐ Batch Processing
- ☐ Facilities Management
- ☐ Professional Services - Programming and Analysis
- ☐ Professional Services - Education and Consulting
- ☐ Integrated Systems
- ☐ _____
- ☐ Systems Software - Mainframe/mini
- ☐ Systems Software - Personal Computer
- ☐ Application Software - Mainframe/mini
- ☐ Applications Software - Personal Computer
- ☐ _____
- ☐ _____
- ☐ _____

L. Interview Profile

1. Type of Interview:

Type of Respondent	Type of Interview							
	On-Site		Phone		Mail		Total	
	Number	R/A or Senior	Number	R/A or Senior	Number	R/A or Senior	Number	R/A or Senior
User	6	Sr.	25	10 R/A 15 Sr.			31	10 R/A 21 Sr.
Vendor								
Other (Specify) _____								
Total	6	Sr.	25	10 R/A 15 Sr.			31	10 R/A 21 Sr.

7. _____

INPUT

2. Respondent Characteristics

Number of Interviews	Job Function	Company Characteristics (e.g., SIC, Size, etc.)
31 Total	Management level	Cross industry
	Information Systems	with over
	IS Planners	1000 employees
	Business Planners	
	General Management/	
	Financial Officer	
	Possibly Multiple Interviews within the same Company	

M. Page Allocations

Text	45	
Exhibits	20	- but only 12 pages
Sub-total	57	
Appendices	5	
Total Pages	62	

N. Table of Contents: Overview

Multiple Exhibits per page

Pg Count assumes inserted exhibits

	# Exhibits	# Text	Total Pages
I. INTRODUCTION			
A. Objective, Audience and Need	1	1	1
B. Scope and Use		1	1
C. Methodology	5	2	3
D. Related INPUT Reports		1	1
II. EXECUTIVE SUMMARY (Format = Standard)			
A. Purpose		1	1
B. Findings		2	2
C. Recommendations	1	2	2
III. The need and the impediments			
A. Why plan IS at all?	3	1	3
B. Why integrate IS and corporate planning	1	3	4
C. Why do companies not integrate	1	1	2
D. What are results of not integrating		1	1
E.			
F.			
IV. How to integrate IS & Corporate planning efforts			
A. Convincing top management		1	1
B. Who should participate	1	1	2
C. What are the required resources		1	1
D. Can you use IS planning methodologies	4	3	6
E. What does work	3	8	11
V. Results of integrated planning effort (DOCUMENTATION)			
A. Integrated Plan table of contents & brief description		3	3
B. IS Annual Report		2	2
C. Guidelines for line managers		3	3
D. Others Documentation		3	3
Conclusions			
VI. Recommendations			
A. Action Plan		3	3
B. Caveats		1	1
C.			
D.			
VII.			
A.			
B.			
C.			
D.			
Sub-total Pages	12	45	57
APPENDIX			
A. Definitions		1	1
B. Data Base			
C. Bibliography		2	2
D. Plan Table of Contents (?)			
E. Questionnaire - Vendor			
F. Questionnaire - User		2	2
G. Index			
Total Pages	12	50	62

Q. Other Research

1. Library: Source: _____

   Objective: _____

2. Reports:

Code	Title	Objective
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. Other Sources:

   _____

   _____

   _____

P. Project Management

1. Project Manager _____
2. Initiation Date _____ Start Date _____
3. Midpoint Review _____
4. First Draft Due _____
5. Word Processing Begin Date _____
6. Shipping Date _____

Q. Other Comments and Direction _____

_____

_____

_____

_____

_____

R. Detailed Table of Contents Attached? Yes_____ No_____

INPUT

TABLE OF CONTENTS SPECIFICATION

REPORT CODE:	TITLE			
SECTION TITLE:		PAGES:		
SUBSECTION TITLE:	CONTENT/SOURCE	# Exhibits	# Text	Total

I. Introduction

A. Objective, audience and need

B. Scope and use

C. Methodology

Tables of respondents: Title
Industry
No plans, BP only, IS and BP separate, int.
Company organization: Cntrlzd/Dcntrlzd
IS coordination/control: Cntrlzd/Distrbtd
(in terms of planning)

D. Related INPUT reports

II. Executive Summary

A. Purpose

B. Findings - why plan, benefits, impediments, what works

C. Recommendations

III. The need and the impediments

A. Why plan IS at all?
Table of benefits
Table of issues of IS
Table of issues of CP

B. Why should IS and corporate planning be integrated?
Table of benefits or common themes of results
Case study of payback
Definition

C. Why do companies not integrate?
Table of impediments or reasons

D. What are results of not integrating?

IV. How to integrate planning efforts?

A. Convincing top management

B. Who should participate?
List of participants or structure of task force
along with their roles

C. What are the required resources? (time, consultants, books, courses and money) from throughout organization with IS emphasis

D. Can you use IS planning methodologies?
Diagram of BSP methodology
Diagram/list of CSF methodology
Diagram/list of any other identified by at least 3 of respondents
List of the dangers or pitfalls of BSP/CSF/other?

E. What does work?
Table of keys to success
Communication plus diagram of process
Planning sessions
Joint study teams
Integration with budget process plus diagram

V. Results of integrated planning effort (Documentation)

A. Integrated Plan Table of Contents and brief description

B. IS Annual Report

C. Guidelines for line managers

D. Other documentation

VI. Conclusions & Recommendations
A. Conclusions
B. Action plan

C. Caveats

APPENDIX

Definitions
Bibliography
Questionnaire
Other sample TOC?
or guidelines?

National® Brand 45-611 Eye Ease® 45-711 20/20 Buff Made in USA

Table I - Company Plan Profile

		Industry	Respondent Function	Planning Characterization: Info Sys	Business	Consolidated	State of Integration
Pet	1	Process mfg.	BP ✗				
			GM ✗	C	D	Y	I ✗
1st	2	Banking & Finance	ISP ✗	C	C	n/a	N ✗
FF	3	Insurance	ISP ✗	C	C	n/a	N ✗
Raychem	4	Process mfg.	ISM ✗	D	D	Y	I ✗
Unstate	5	Disc mfg.	BP ✗	C	C	n/a	I ✗
NSF	6	gov't fed	ISM ✗	C	D	N	N ✗
Kidder	7	other broker	GM ✗	D	D	N	L ✗
RCA	8	Services	BP ✗	D	D	Y	L ✗
			ISP ✗				
Rapicon	9	Dis mfg.	BP ✗	C	D	Y	I ✗
Convgt.	10	Dis mfg.	ISM ✗	C	C	n/a	I ✗
GM	11	Dis mfg	ISP ✗	D	D	Y	N ✗
Gates	12	Dis mfg	BP ✗	C	D	Y	N ✗
SRI	13	Services	GM ✗	D	D	Y	I ✗
McKesson	14	Services	GM ✗	C	D	Y	I ✗
Oil	15	proc mfg	ISP ✗	D	D	Y	I ✗
Sec.	19	Banking	GM ✗	C	D	Y	I ✗
Bachtel	20	Services	ISP ✗	D	D	Y	L ✗
DelMonte	21	proc mfg	ISP ✗	D	D	Y	I ✗
~~Superwood~~	~~22~~	~~proc mfg~~	~~ISM~~ ~~BP~~ ✓	~~D~~	~~D~~	~~N~~	~~n/a~~
~~Red Wing~~	~~23~~	~~dis mfg~~	~~ISP~~ ✓	~~C~~	~~C~~	~~n/a~~	~~n/a~~
New Eng. Nucl.	24	proc mfg	ISM ✗ computer mfg	C	C	n/a	I ✗
Augs. Pub.	25	proc mfg	ISP ✓	C	C	n/a	N ✗
~~Fed Res.~~	~~26~~	~~Banking~~ Govt.	ISM comp mfg.	~~C~~	~~C~~	~~n/a~~	~~n/a~~
Atlas	27	proc mfg.	ISM ~~ISP~~ ✗	C	C	n/a	I ✗
Pritzers	28	proc mfg	ISM ~~ISP~~ ✗	C	C	n/a	I ✗
Family	29	proc mfg	ISM ~~ISP~~ ✗	C	C	n/a	I ✗
Huttley	30	proc mfg	ISM ~~ISP~~ ✗	C	C	n/a	I ✗
Western Lith	31	proc mfg	ISM ✗	D	C	N	N ✗
Carth.	32	proc mfg	ISM ~~ISP~~ ✗	C	C	n/a	I ✗
Garelick	33	proc mfg	ISM ✗	C	C	n/a	I ✗
Minn.	34	other (svcs.) newspaper	ISM ✗	C	C	n/a	I ✗
Brosch	35	proc mfg	2 ISM & ISP ✗	C	D	N	I ✗
Wilson	36	proc mfg	ISM ~~BP~~ ✗	D	D	Y	I ✗
ARCO	16	Energy	ISP ✗	D	D	Y	N ✗
S Cal	17	Util.	GM ✗	C	C	N/A	I ✗
North	18	Discrete Mfgt.	ISP ✓	D	C	Y	N ✗

Fin. Bnk & Brk., Ins = 4
Govt = 1
Util = 1

Svcs. = 4+1 = 5
Energy = 1

Proc. mfgt. 15
Disc. = 6

Table I - Company Plan Profile

Q. 1 + 3 Last Part

INDUSTRY	Respondent Function	Planning Characterization: Information Systems	Planning Characterization: Business	Planning Characterization: Consolidated	State of Integration

ISM
BP
ISP
GM

C = Centralized
D = Decentralized

C = Centralized
D = Decentralized

Y = Yes
N = No
N/A = Not applicable

I = Integrated
L = Limited
N = Not integrated

Examples

Pet. - Proc. Mfgt.	ISM BP	C	D	Y	I
Pet. Wat. - Other	ISP	C	C	N/A	N

Table II - Respondents

Respondent Functions	Total
Information Systems Management	~~15~~ ~~14~~
Business Planner	5
Information Systems Planner	11 ~~15~~ ~~10~~
General Management	~~5~~ 6
~~Data Processing~~	~~2~~
~~Company Manage~~	~~2~~
Total	~~36~~ 37

Tab. of Respondent functions

Before #1

Total of ~~36~~ 37 interviews

2 companies had 2 persons interviewed

1 " " 3 " "

3 Companies no good - toss out

36 int.
3 no good
33 Companies
3 with extras.

✓ Table III State of Integration

	Total
Integrated	~~20~~ 21
Linked	3
Not integrated	~~7~~ 9
~~no answer n/a~~	~~3~~
Total	33 *

33 companies interviewed
(~~35~~ 37 people interviewed)

Tab of 3 (end)

Impediments

Ineffective/inadequate communications	8
mgt down, IS to/from mgt, IS to users, line to line	
Financial, time & staffing constraints	4
Can not justify costs of IS	6
Company reorganizing & redeploying resources	4
Do not understand benefits of int. planning	3
Others	3

Results of not Integrating

Ineffective resource prioritization and utilization	6
IS does not clearly support business goals	2
Increased costs of IS development (~~duplicate~~ redundancies)	2
Lost opportunity to use tech. in operations area	2
IS morale affected (forced to be reactive)	2

Table VI - Impediments to Integrated Planning

#5

Impediment	Total Responding Yes.	
Lack of top mgt. support	3 ✓	
Staff constraints	2 ✓	
Time constraints	1 ✓	
Don't know benefits	2 ✓	
Don't know how	1	
Lack of downward communication	3 ✓	5 +1 ✓
Lack of communication between IS + users	1 ✓	
Lack of communication between line + systems organizations	1	
Mgmt doesn't understand IS benefits - can't justify cost	1 ✓	
financial constraints	1 ✓	
high growth rate - resources directed to advertising	1 ✓	
recently acquired - new management	1 ✓	
business strategy - service oriented - not growing	1 ✓	
system too small to need integration	1	
No push from business (initiative from IS only)	1 ✓	
OP does not understand business	1 ✓ comm.	
No adequate mgt. team	1 ✓	
Company reorganization	1 ✓	

✓ Table VII - Results of not Integrating

#5 part II

Results	Total Responding Yes
Ineffective resource prioritization	3 + 1 ✓
IS does not clearly support business goals	1 + 1 ✓
Increased costs of IS development (dupl.	2 ✓
mediocre DP support	1 ✓
Lost opportunity to use technology in operations area	1 + 1
Morale affected - feel not keeping up with competition	1 1
Have not built a system with an ROI	1 1

(IS feels jerked around - forced to be reactive not proactive)

only real joint was Prod.

Business Planners

J	Productivity and cost control	9
	Economic downturn	2
Joint with Cap. Pl. & Arch.	Managing & planning for growth	4
	Market focus & development	4
J	Int. IS as strategic tool ~~Business planning~~	2

Info Systems Planners — See Bechtel & ARCO

J	Cost control & productivity	5
J	System architecture	16
J	Capacity planning	15
	Micro proliferation & issues	10
	Manpower planning & development	7
	Resource utilization improvement	4
	System justification	3
J	Integrating IS with B.P.	2
	Info/data resource mgt.	2
	User education	2
	Improving IS/mgt. comm.	4
	Security & disaster planning	2
	Others	3

Table IV and V issues

Business Planners	Total
• Productivity or cost control	6+1+2
• Economic downturn	2
• market focus & development	4
• managing and planning for growth	2+1
- acquisitions & divestiture planning	1
~~• cost control~~	~~2~~
• Integrating business planning & IS for strategic tool	2

Information Systems Planners	
• Integrating BP & IS for IS as strat. tool	1+1+2
✓ • Manpower planning & development	7
✓ • capacity planning	12 +2+1
✓ • system architecture	13+1+2
✓ • microcomputer proliferation	8+2
OK ~~• Improved communications from IS to mgmt~~	~~4~~
✓ • Cost control & productivity	~~7~~ 5
✓ • more effective use of resources	3+1
✓ • system justification & planning	3
~~• growth planning~~	~~1~~
~~• system upgrade planning~~	~~2~~
~~need for more distributed processing (integrating micros)~~	~~2~~
~~• telecommunications~~	~~2~~
✓ • reduce maintenance	1
• shorter life cycle	1? del.
• security & disaster planning	1
~~• backlogging?~~	~~1~~
✓ • Info/data resource mgt.	1+1
✓ • User education (of execs (IS as strategic) & end users)	1+1

Table IV and V - Issues

#2

Business Planners	Total Responding Yes
Productivity	
Economic downturn	
_____	
_____	
_____	
_____	

Enter all others mentioned

I am looking for joint issues

Information Systems Planners	Total Responding Yes
Manpower planning & development	
Capacity planning	
System architecture	
Microcomputer proliferation	
_____	
_____	
_____	

Enter all others mentioned

Table XIV - Resources

#11

Consultants	Total responding yes
Not used	XXXXXXXX
IBM - BSP	X X XX
SRI	XXXX
Strong - Kischart	X
US of Future	X
Sister companies or branches	X
Boeing Computer Svcs	X
IRA - BITS (Chevy Chase, MD)	X
Boston Consulting Group	X X
Private Consultant	X
Didn't know who	X
DRI	X
A D Little	X

Books Recommended	
Holland's System	X
ACS	X
Executive Succession Plan from IBM	X
BSP - IBM	XX
SRI - long-range business planning series	XX
Executive Guide to MRP II (Ollie Wight)	X

see over for others

Seminars Recommended	
Key Manager meetings - seminars on planning, systems as strat. weapons	XX

other Books

Journal of Capacity Management, Institute for Software Engineering

Strategic Planning for Multinational Corporations, Selig

In Search of Excellence, ?

"Management by Objective" - ?

Competitive Strategy, Michael Porter

Corp. Info. System Mgt., McFarlan & McKenny

Strat Planning for MIS, Ephraim McLean

Table XII - Convincing Top Management #9

How convinced	Number responding yes
One bad experience	///
One good experience (quality DP showed effectiveness in in meeting objectives) (Contributes to rev.	X /// Pet
Professional IS management 3	
Increasing communications costs required IS prof mgr.	X
Limited Resources required better use of them	XX
Parent companies decision	X
Board of Directors developed plan and hired person to implement	X
management convinced IS - "sorted" IS with business people	X
Top down decision - aware top exec or CEO ...	XXXXXX
Changing corporate culture recognized criticality of IS	X +1 Pet

TOP DOWN direction

- promotes prof. IS

(Sec. Pac. AECO

no answer XXXXXX

others attached →

More meetings of IS with mgt. to communicate directions	/
IS speaks business language	/
CEO believes in planning (longest int.)	/

SCal

BENEFITS:

What are the benefits you have derived from having integrated planning? (Check those which apply)

Management performance is monitored against the business plan

Effective resource prioritization

Reduced costs of Information Systems through planning and coordination

Information Systems clearly supports business goals/objectives

Other _____

✓ Eliminate bureaucracy

✓ Fix accountability at lower (but proper) levels -- put responsibility on right shoulders. Measure to bottom line.

(9) CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

✓ High computer literacy demanded it

✓ Recognized that MIS can operate a physical network or computing resources without having to know the things on it.

✓ Goal is to "disenchant or demystify" computer resources

BENEFITS:

What are the benefits you have derived from having integrated planning?

(Check those which apply)

Management performance is monitored against the business plan

Effective resource prioritization

Reduced costs of Information Systems through planning and coordination

✓ Information Systems clearly supports business goals/objectives

Other _____

✓ Use systems to improve competitiveness - eg. by linking hdq. systems to customers for order entry makes it very easy to do business with us

✓ Remove redundant systems during acquisition period

(9) CONVINCING TOP MANAGEMENT

How did you convince top management of the need to integrate?

• Inevitable because of systems impact eg. last year we bought a company - consolidation was easy due to system. (process would not have happened otherwise) eg. order processing was able to handle the structural change

• One experience of the benefits of adequate systems convinced top mgt

• Growing philosophy to become more focussed as a mfgtr and to remove barriers between line units which translates to sharing of functions such as purchasing distribution and shared systems is also consistent

National® Brand 45-613 Eye-Ease® 45-713 20/20 Buff Made in USA

Issues

		1	2	3	4	5
	Business Planner					
1	✓ acquisition + divestitures			X		
2	✓ productivity			XXXXXX		
3	✓ market focus + div.			XXXX		
4	✓ managing growth			XX		
5	✓ cost control			XX		
6	integration of BP + IS			X		
7	IS as strategic tool			X		
8	✓ economic turnaround			X		
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20	IS Planner					
21						
22	(4) microcomputer proliferation			✓ XXXXXXXX		
23	(3) system architecture			✓ XXXXXXXXXXXXXX		
24	system justification + planning			✓ XXX		
25	reduce maintenance			✓ X		
26	use resources effectively			✓ XXX		
27	shorten life cycles			✓ X		
28	data communication from IS to users			✓ XXXX		
29	need for more distributed computing			✓ XX	(subjective)	
30	cost control + productivity			✓ XXX		
31	(1) manpower planning + dev.			✓ XXXXXXX		
32	managing growth			✓ X		
33	(2) capacity planning			✓ XXXXXXXXXXXX		
34	security + disaster planning			X		
35	telecommunications			✓ XX		
36	system upgrade			✓ XX		
37	bankruptcy			X		
38						
39						
40						

Impediments

Lack of top mgmt support			XXX
staff constraints			XX
time constraints			X
don't know why integrate			XX
don't know how "			X
other			
high growth rate - resources diverted	✓	X	
lack of downward communication	✓	XXX	
acquired - means new mgmt	✓	X	
line + systems organ. analyst communicate	✓	X	
communication problem between IS + users	✓	X	
mgmt doesn't understand IS benefits - can't justify cost	✓	X	
business stable - service oriented		X	
financial constraints	✓	X	
system too small to need integration			

Results of Not Integrating

Ineffective resource prioritization	X	X	✓
IS doesn't support business goals		X	✓
increased cost of IS development	XX		✓
other			
divisions compete for resources	X		✓
have not built systems with an ROI	X		
mediocre DP support	X		✓
Lost opportunities to use technology in operation areas	X		✓
Morale affected - not keeping up with competition	X		

...icios)

National Brand 45-613 Eye-Ease® 45-713 20/20 Buff Made in USA

Table X - Definitions

Business Plan defines Information Systems needs
Business Plan & Info Sys plan calendars are synchroni
Line & Staff mgrs participate actively in IS pla

all of above
Other

C • Cost advantages - IS provides tools to better serve clien
C • all production planning geared around IS (s
No • Corporate plan basis for MIS planning
• Process of system plan conceived while developing plan - "a marrying of process" so business p allocates resources to system plan - system a resources to business needs
• System plan provides management growth tools a process control for growth
C • IS function distributed to business segments
• IS plan fulfills business plan and direct
Limited • IS participates in business plan
C • IS & Business not two separate plans - one integrated
C • must be informal
• Business Plan includes IS as part of operating budg
n/a XX

• IS becomes a strategic tool (provides for flexibility is proactive - not re
• IS actively participates in business planning (no
• Integrated process
C • Only one plan with enough info to extract a (still need a classic system plan - ala Jan

Def. is elusive
so characterize
in terms of process
or products

XX
XXXXXXXXX Linked
XXXXX

XXXXX

inform mgt X
term) X (mgt.) No
X

XX
XX (mgt.) Systems supports business plans of mgt growth & prod. ctl.

X
it-feedback loop XXXX
X Linked
X
X
X Linked

options no matter what bus. direction is taken) TIII 1
be)
e other way around) is ideal 1

1

applic. dev. priority scheme 1
Nati - see Northrop

✓ Table X · Definitions or characterizations

15
~~11~~ others

	Definition	Total Responding	Yes	
C	IS becomes a strategic tool	2 + 6	8	← new entry & see others
P	BP & ISP calendars are synchronized	~~8~~ 9	9	
P	IS participates actively in business planning or vice versa	5 + 2	7	← new entry
	all of above	5		distr.?
P	Loop process	7	7	
Prod	One plan	5 ~~3~~ 4 (SRI, Comp, Prod. Ch. + ?)		

n/a = 2

Def. is elusive so characterize in terms of process or products

see attached

National 45-613 Eye-Ease® 45-713 20/20 Buff Made in USA

Benefits - Table XI

(3) • Management Performance is monitored against the busin
(4) • Effective resource prioritization
(2) • Reduced IS costs through planning & coordination
(1) • IS clearly supports business goals/objectives

Other

• ~~Eliminate bureaucracy~~
(3) • Management responsible - proper level accountable
(1) • Better customer service - info more current
(1) • New lines of business developed
(6) • Consolidates company - aids communication in mu
(1) • overall needs of company more apparent
(2) • Eliminates paperwork - based on too little inf
(2) • Eliminates crises - productive rather than reactive
(4) • Better teamwork - balance between product/market dev an
(1) • Better sense of direction - feedback to business plan
(6) • Increased profits
(1) • Takes advantage of technology in terms of competitive
(2) • System better accepted - requirements better understo
(2) • Remove redundant systems during acquisition

• Too easy to tell X
• Total failure! X

(6) • Specific Payback (question 15) XXXXXXXXX

(5) • Reduction in staff - particularly mid-level mgt.

(1) • Users promote their own productivity & not dep on

plan

XXX
XXXXX 1
XXXXXXXXX 1
XXXXXXXXXXXX (111 = only way to run a company)
Pet

X
XX
XXXX
XXX
goals XXXXXXX ?
XX
X
XXX
people dev XX
XX
XX
position XX
ood X
X

Accountability with user

11

ip as a tool

3	Payback	11
1	IS clearly supports	30
2	Reduced costs	16
4	Eff. res. prioritization	8
combine < 5	Accountability	5
6	Plan aids in meeting goals	7

Table XI - Benefits of Integrated Planning #8

Benefit	Total responding Yes
Effective resource prioritization	
Reduced costs of IS	
IS clearly supports business goals objectives	
(other)	
Specific pay back	9
~~[illegible]~~	
~~[illegible]~~	
~~[illegible]~~	

[Take 9 from #15]

National® Brand 45-613 Eye-Ease® 45-713 20/20 Buff Made in USA

XIII Participants and Roles

Participant	YES	Overall Direction	IS Direction	Plan Implement	Evaluate Recommend Changes
• ISM	11 ~~11~~ ~~11~~	XXXXXXX	XXX		
• BP	XX XXXXXX	XXX			X
• ISP	XXXXXX	X	XXX		
• LM	XXXXXXXXXXXX	X	X	XXXXX	XX
• GM	XXXXXXXXXXX	X		X	XXX
• all of above	XXXX				
other					
• Corporate mgmt	XXX	XX			
• Consultants	X		X		
• Combined task force	XX				

Div or line plans

	Overall Direction & policy	Eval. Rec. chg. Approve	IS Direction & Plan	IS Plan Impl.
GM	RX	RX		
LM	RX	CX		
ISM	RX	CX	RX	RX
BP	CX			
ISP	CX		CX	
Consultants or task force			CX	

Responsible

Contributes

6	7	8	9	10	11	12	13
solidates	BP Direction	Policy decisions approvals	All interactive		Studies	Educ. as to IS role	
XX							
XX	XXX		X		X		
XXX					X	X	
X	X	X	X				
		XXXX	X				
			XXXX				
X							
			XX				
Bus Pla Dept.	Plan consolidation	Studies	Educ. on IS Role				
RX							
CX							
			RX				
	RX	RX	CX				
	RX	RX	CX				
		CX	CX				

Table XIII - Participants and Roles

#10
Would to be able to do a chart.
To greater or lesser degree, all participate - what is their role?

Participant	Yes	Overall Direction	IS Direction	Plan Implementation	Studies	Consultation	Other???
ISM			X	(X)			
ISP					X	X	
BP					X	X	
LM				X			
GM		X					
Task forces		X	X		X		

Please enter other roles and tell me if you agree with this.

See APCO

National® Brand 45-613 Eye-Ease® 45-713 20/20 Buff Made in USA

Table IX Deficiencies of Methodology

BSP (7) 5 - yes 2 - D.K. yet

- Too static - no steps to implement - had to develop internal methodology
- Not a "living" document - doesn't support on-going planning
- Not designed for integrating
- Focus on data elements
- Doesn't provide for long range objectives
- Doesn't " " future technologies } X
- Too forced and artificial
- Too early to tell or not sure yet X
- Wallow in data XX
- Breakdown of org. changes
- Goes from strategic issues to detail too quickly

ARCO
S'Cal
Northrop

Internally Developed Methodology (6) (4 Y)

- Too easy X
- No problems X
- Identifies development projects for next year only - not a long-range planning tool XX
- Too Busy fighting fires to review and learn from lessons (AT&T divestiture) X
- Not structured - but is ongoing a structured or formal process assume IS doesn't understand the business X

All of Above in Combination (3) 1 - No Prob. 2 - yes

NO problems X

Total failure - too complex, too much, too soon for corp. capabilities X

CSF ← see
IDM ← see } X

NONE (10) comments:

- Too structured - might be useful in more mature org in terms of mgmt process
- Too academic - irrelevant (adaptive approach needed -

CSF

X
- Too academic
- More form than substance
- Difficult to force if it doesn't fit
- Managers couldn't see purpose of exercise and how it related to developing a systems plan

Other

Capacity Management - No deficiencies
SRI - No deficiencies
MRP - not a sales forecasting tool

✓ Table IX - Deficiencies of Methodologies

#6 + 12 (last part)

Deficiencies	Total Responding Yes
(7 used) BSP	5 (2 don't know yet)
(1) used CSF	1
(6) used IDM	4
Other	
Other	

See attached

✓ Table VIII - Methodologies Used

From # 6 and 12 *

Methodologies	Total Responding Yes		
None (or n/a)	12		
~~IIII~~ III BSP (Business Systems Plan)	7	8 +2	10
II CSF (Critical Success Factors)	1	2 +1	3
~~IIII~~ II IDM (Internally Dev. Meth.)	6	7 +2	9
IIIII all of above in combination	3	5	redist. to BSP, CSF & IDM
other: SRI - mgmt consultant	1	+1	3
Nolan/Norton approach	11		2
capacity mgmt	1		
MRP	1		

33 companies

n/a II
NO ~~IIII~~ ~~IIII~~

BSP = 10
IDM = 9 some structure (See S. Cal. - combinations etc.) - IS as critical leverage - "Competition info services"
or IS as "comp. weapon")
CSF = 3
SRI = 3 (Capacity mgt & enhanced MRP II)
Nolan/Norton = 2
None or N/A = 12 ad hoc - flexible - adaptive

✓ Table XIII - Payback

#15

Payback	Total responding yes
Yes	XXXXXXXXXX
No	XXXXXXXX
No answer	
too early to tell	XXXX
not sure - never measured	X

which interviewer said Yes
#10
#15
#19
#1
#13
#14
#28
#33
#34

said NO but gave payback #4

said NO but interested in case study #30

#21 - had no page for question 15

Table XV - Integration Methodologies #13

Characterization	Total responding yes
C Communications high	X
Loop process	XXX
✓ IS & BP integrated with budget process	XXXXXXXX
✓ Guidelines developed	XXX
C ✓ Joint study teams on direction & issues (task force)	XXXX
C Key management sessions	XXX
C ✓ Joint planning sessions	XXXXXXX
C IS provides consulting/education to business	XXX

Table XVI – Documentation Results #14

Documentations	Total responding yes
Single plan (strategic or long-range or capital)	XXXXXXX
IS is a line item on business plans	XX
Separate IS plan	XXXXXXX
Budget/operation plans	X
IS annual or monthly report (some tool to convey IS directions)	XXX
Strategy Papers on IS Topics	X
monthly report of system priorities given to line mgrs	X
Program itself	X
Guidelines and evaluation documentation	XX ?

9 10
4 7
1

None – XXXXXX

For each of the above, if there is good detail, enter the interview number.

#5 16.
#4 17
#15
#21

#7 – lunch?